

Birdcreek Timeline

- 8/14/16 - Sunday - 9:45A, Took initial call from Answering service, Brody Wallace-Bass Brothers called & said oil & SW in creek by HQ - 13-27-7. Dispatch Rob P @ 9:48A. Rob met Kinder Morgan at spill, they have a abandoned line in area.
- 8/16/16 - Dispatch Dallas Nave to look for cause of SW in Creek in SE 12-27-7
- 8/17/16 - Kent Sanborn, EPA, in office & talk to me and Richard Winlock about spill.
- 8/17/16 - Assign Dallas Nave to do a spill report and call in lead to NRC. Dallas will also go and see if dry hole between creek & Danny Carpenter's house to see if it is purging.
- 8/17/16 - AD Farr, Ranch Manager stopped by office to show us maps he had of wells in area of spill.
- 8/18/16 - Kent Sanborn, EPA, called about lead & I let him know Dallas is looking for dry hole.
- 8/18/16 - Talk to Richard Winlock about what Ron Reed had said about B.I.A being on News for spill.

8/19/2016 - Janie Eckhart, EPA, Dallas, called for an update on Bird Creek leak. I gave her legal & let her know Kent is getting list of injection wells within 1/2 mile of bridge.

8/22/16 - Kent Sanborn, EPA, called & said he had walked out spill on Thursday and noticed nothing dead, no fish floating or dead waterbugs etc... He did see 2 dead turtles. Kent said it is almost like it has been there for some time. He is heading back out to look at injection wells on Turek, I called Dallas & he will meet with Kent.

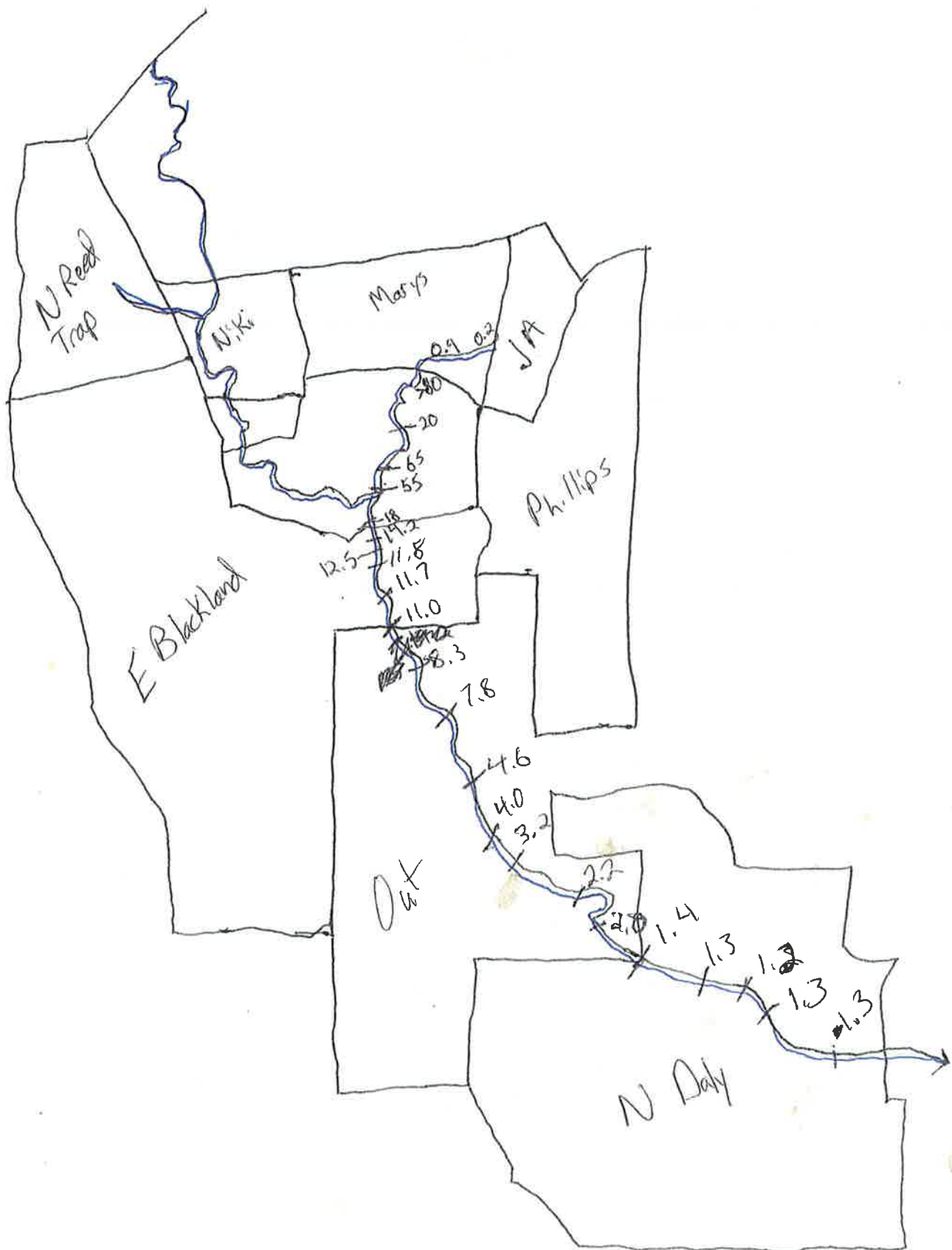
8/22/16 - Ben & I to spill in afternoon & check salinity along creek, ranged from over 80,000 ppm at Bridge to 1,600 ppm below Larry Christenson's house. Met with Mark Hendricks, Ron Reed, Brody Wallace & Danny Carpenter.



our map.

Legend

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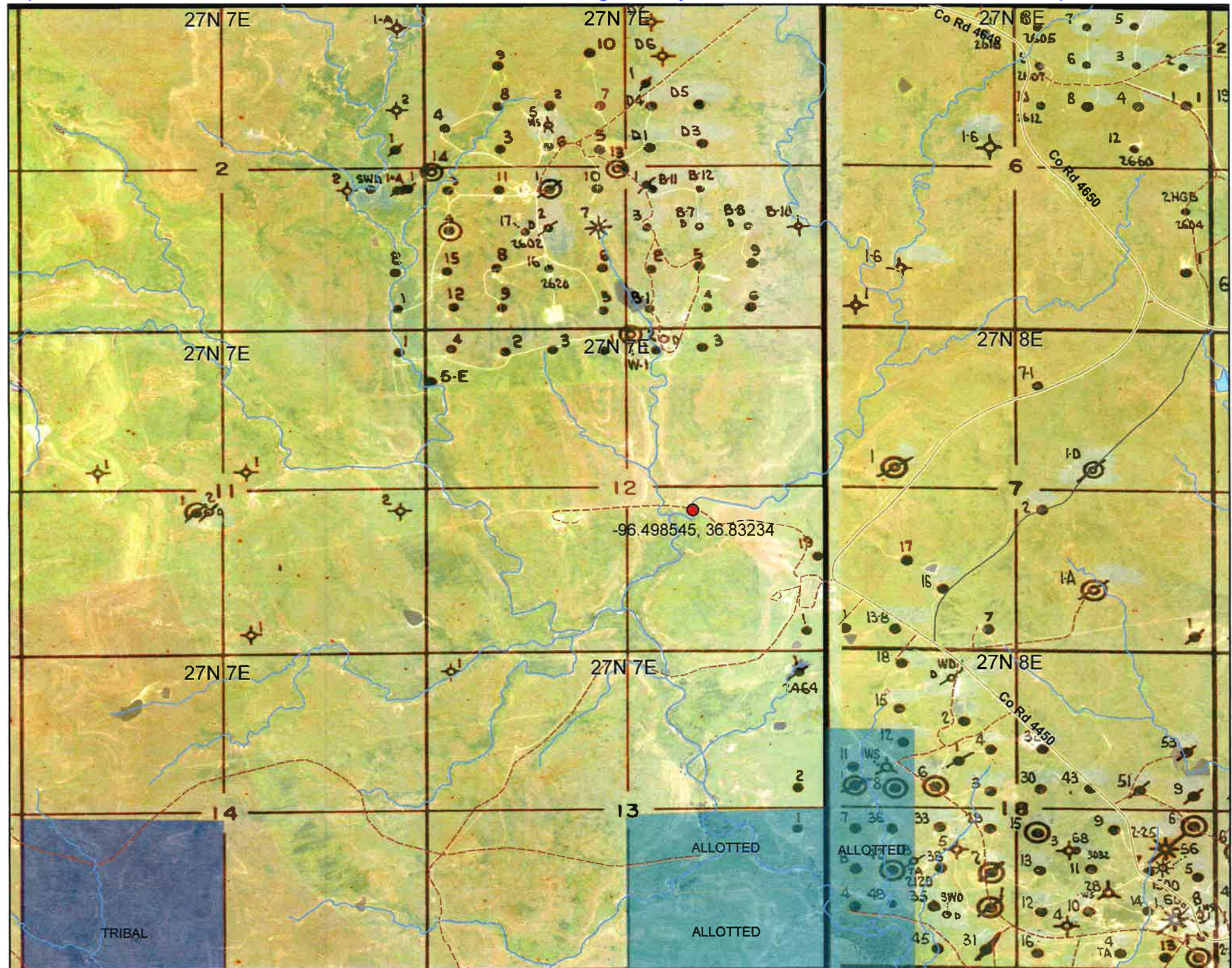


Joe "Dallas" Nave confirmed by
phone on 7-10-17 that readings are
Bird creek spill

tds in ppt

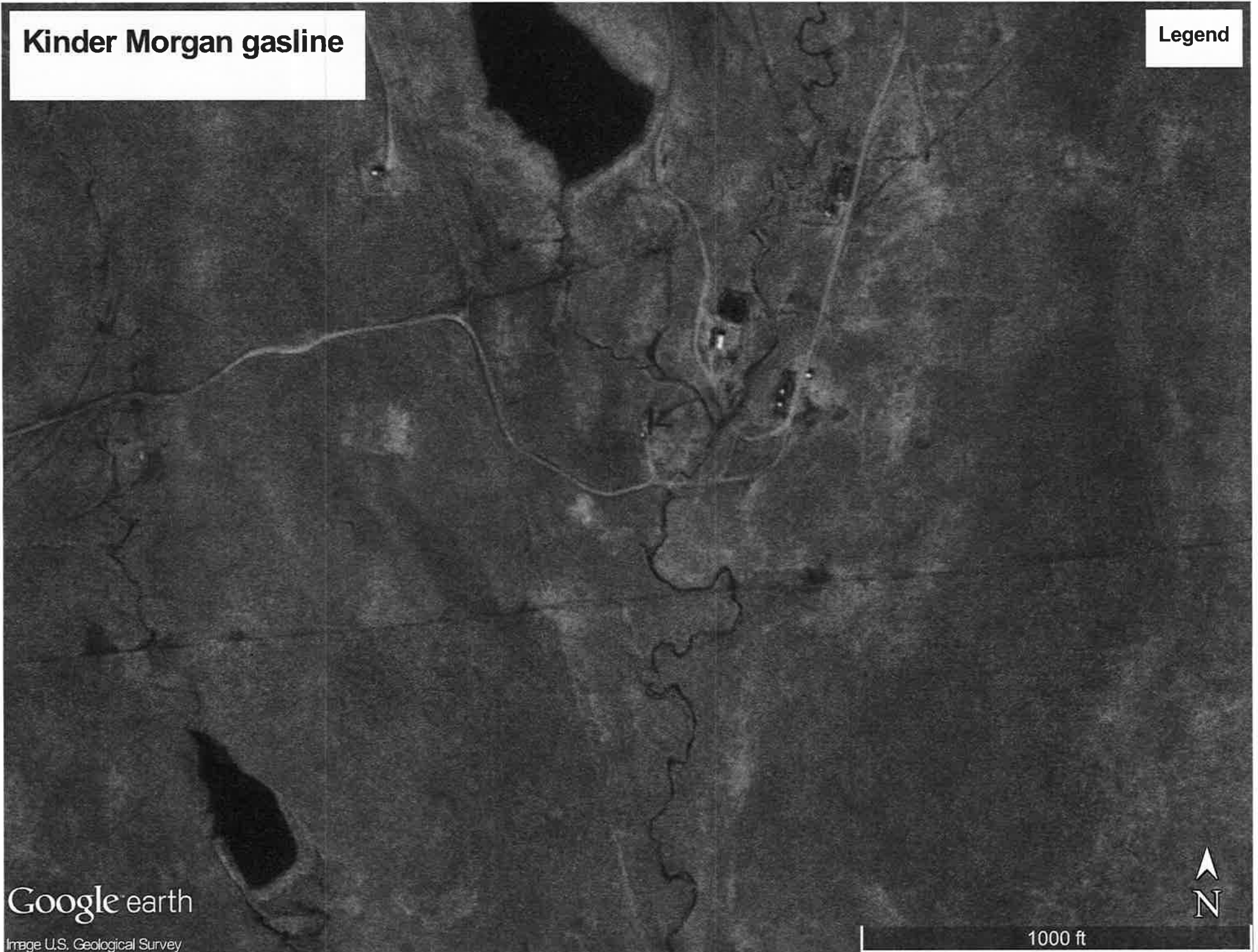
	Larry	Restricted	50 FT from Bridge		
3-1-17	0.9	1.9	18.4		
3-23-17	0.9	1.2	2.1	after it rained	
4-6-17	0.3	0.4	23.5	after it rained	
	50 FT from Bridge	10 FT from Bridge	½ Mile from Bridge	Restricted land	Larry Christenson
11-30-17	49.2			1.9	1.2
12-14-16	27.3			1.9	1.3
12-28-16	30.7			1.9	1.4
1-4-17	26.1			2.0	1.3
1-11-17	25.6			2.0	1.4
1-18-17	0.3			0.5	0.3
4-19-17	14.4	0.3		0.4	0.4
4-25-17	21.7		45.6	0.4	0.4
5-4-17	17.7	0.2	41.5	0.3	0.2
5-9-17	15.8	0.3	46.4	0.4	0.4
5-18-17	4.9	0.3	46.0	0.4	0.3
5-24-17	3.3	1.9	46.0	0.4	0.4
5-31-17	2.4		46.2	0.4	0.4
6-7-17	0.7		42.0	0.4	0.3
6-14-17	0.4		46.0	0.4	0.4





Kinder Morgan gasline

Legend



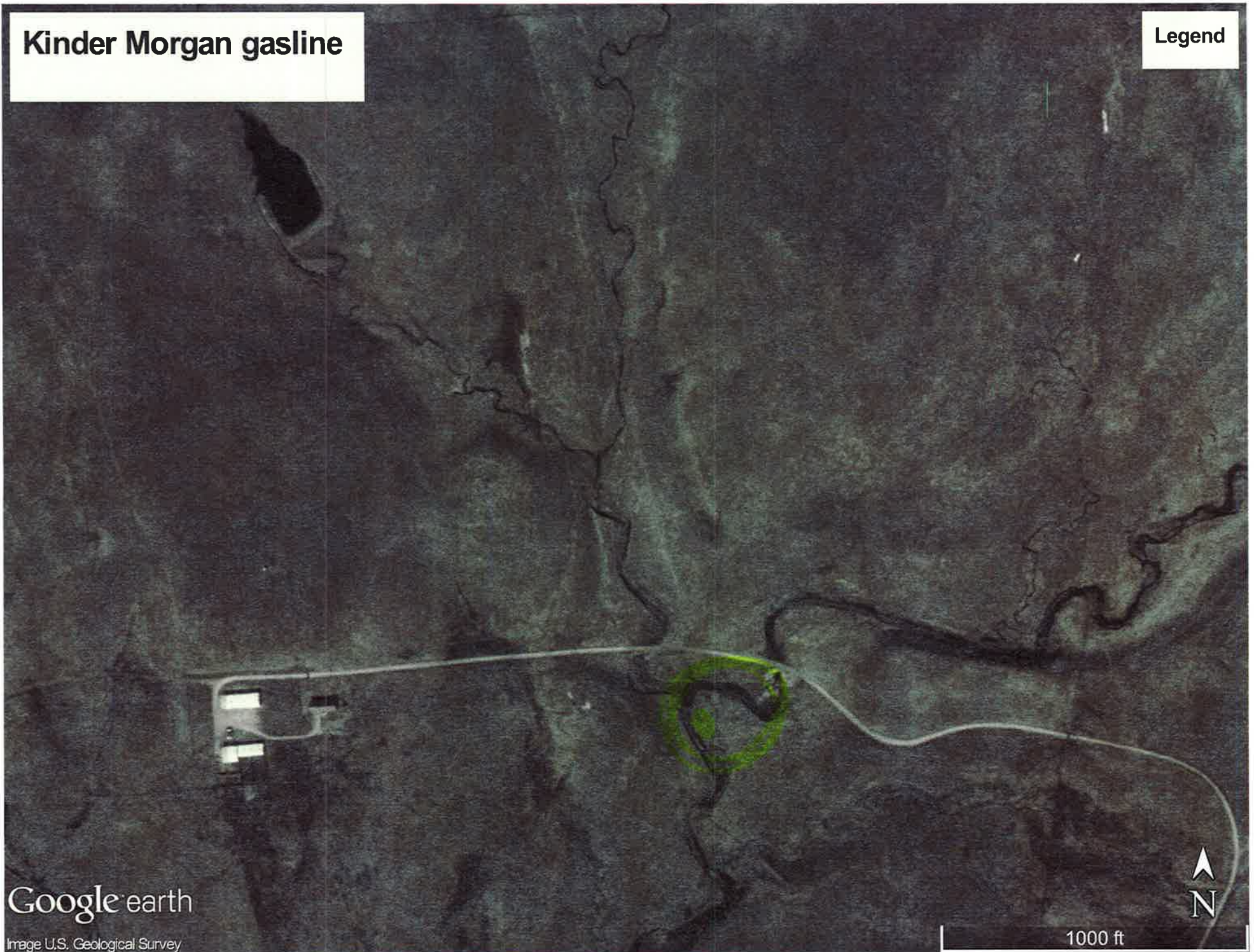
Google earth

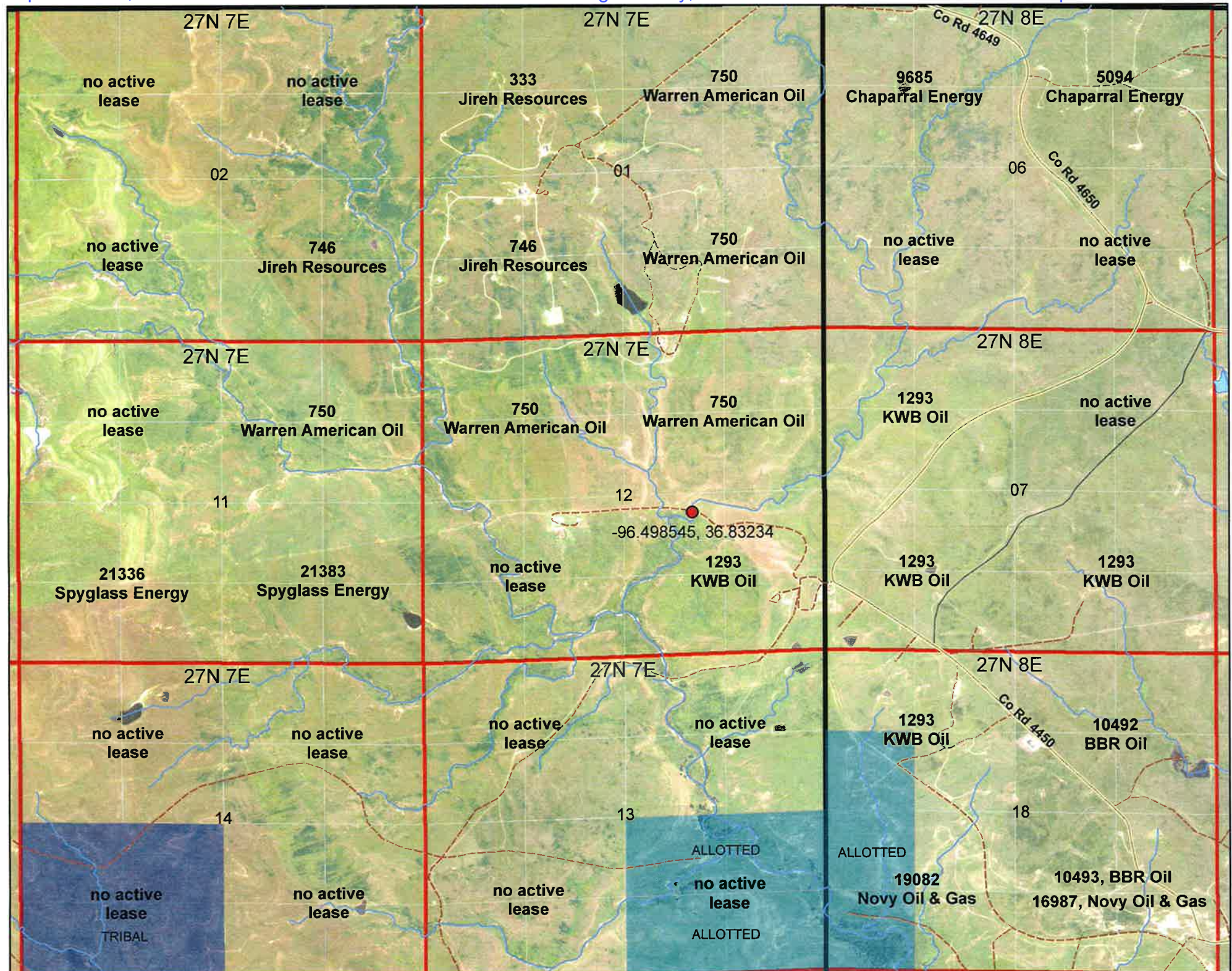
Image U.S. Geological Survey

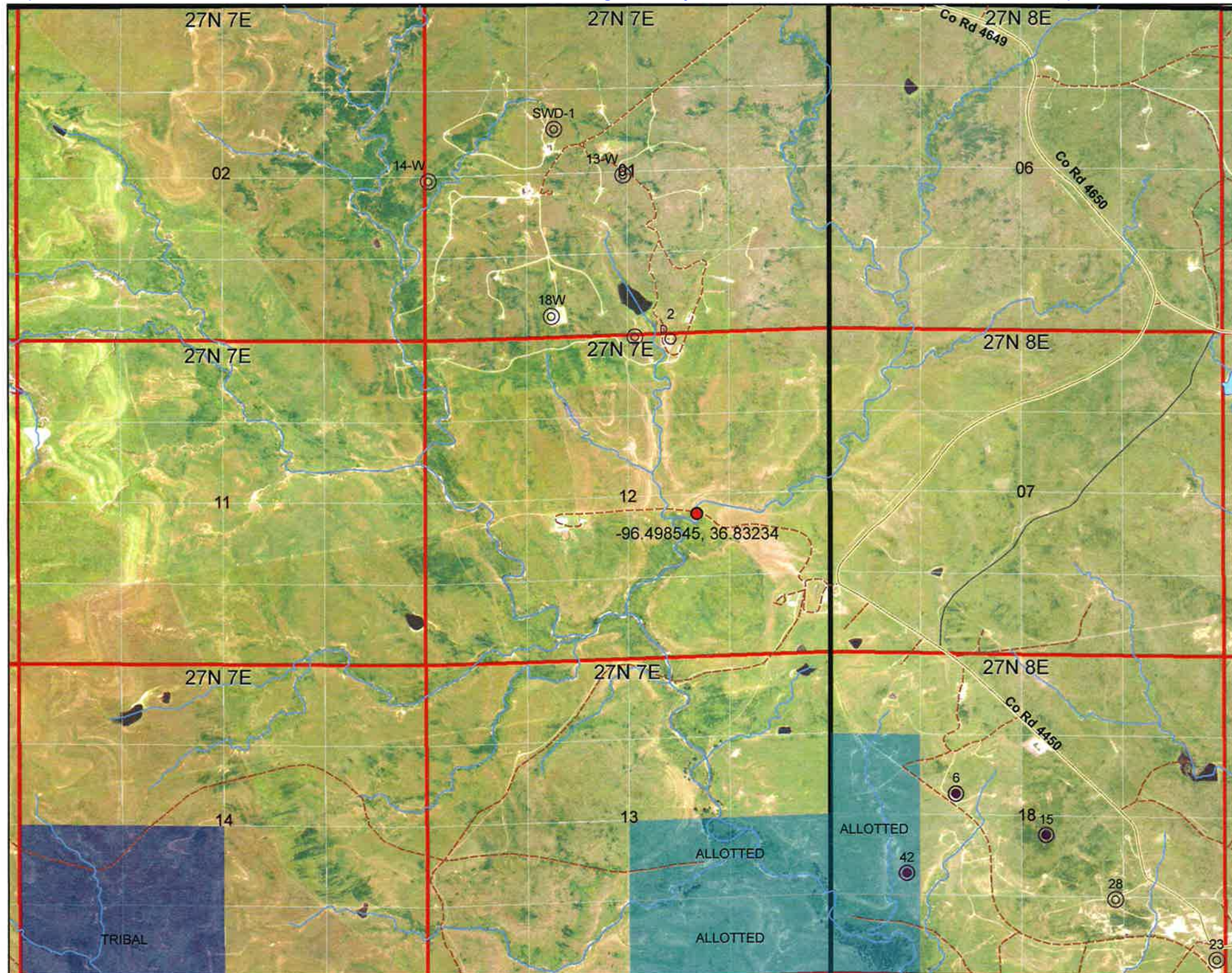
1000 ft

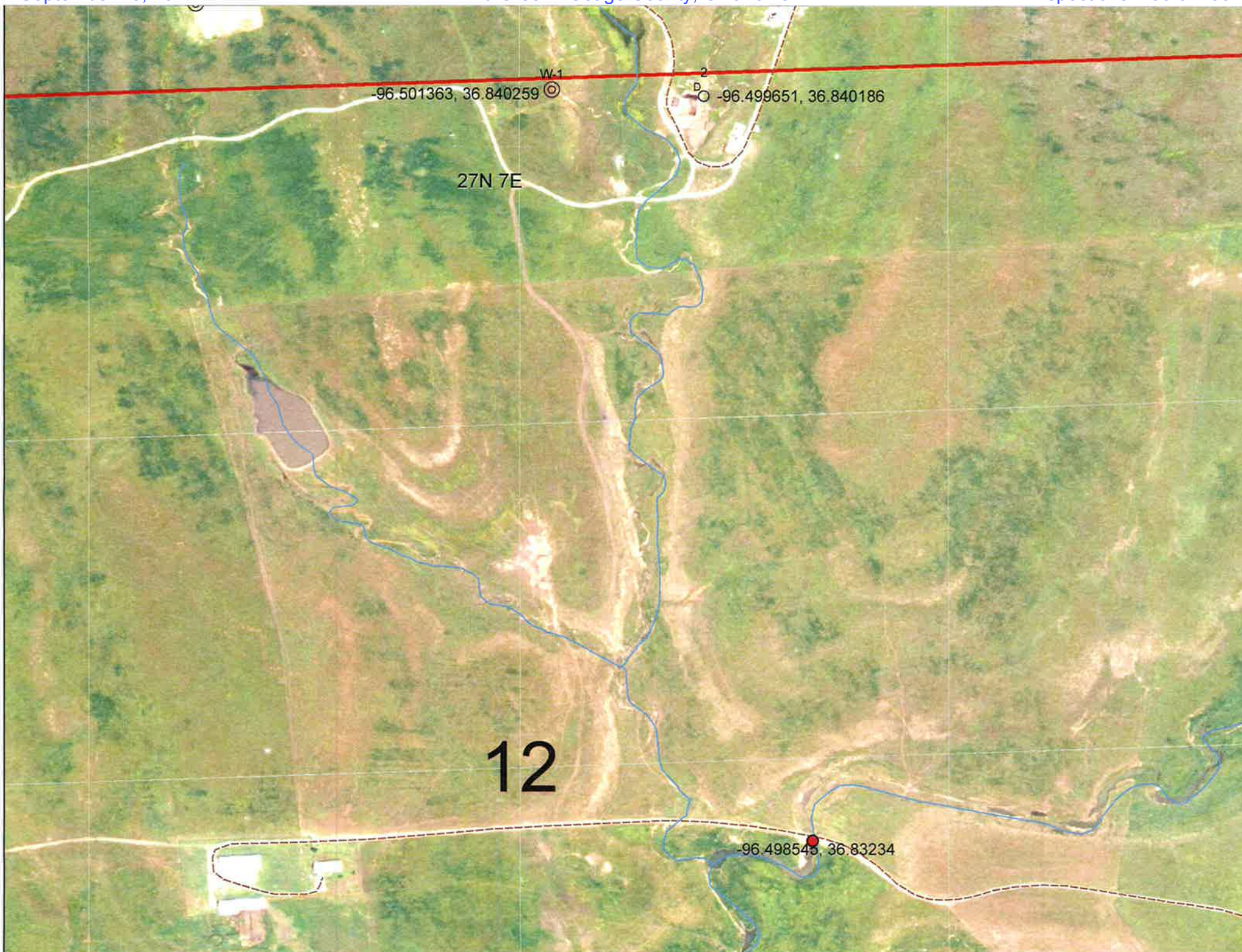
Kinder Morgan gasline

Legend









8/29/2016

DEPARTMENT OF THE INTERIOR Mail - Fwd: Incident Report # 1156565, # 1156568



Swift, Michael <michael.swift@bia.gov>

Fwd: Incident Report # 1156565, # 1156568

1 message

Daniels, Benjamin <benjaminl.daniels@bia.gov>

Mon, Aug 22, 2016 at 7:30 AM

To: Shelby Hanchera <Shelby.Hanchera@bia.gov>, Michael Swift <michael.swift@bia.gov>

Cc: "Ruhl, Christopher" <ruhl.christopher@epa.gov>, "Sanborn, Kent" <Sanborn.Kent@epa.gov>, Beverly LaCrone <blacrone@osagenation-nsn.gov>, "McKay, Tom" <mckay.tom@epa.gov>, "Eckhart, Jeanne" <Eckhart.jeanne@epa.gov>, "Arias, Jack" <Arias.Jack@epa.gov>

This spill impacted water.

Benjamin Daniels

Supervisory Environmental Protection Specialist

Chief, Branch of Enforcement and Lease Compliance

Bureau of Indian Affairs - Osage Agency

Office: (918) 287-5767

benjamin.daniels@bia.gov

BIA Osage AgencyComplaint and Spill HotlinePhone (918) 287-3107Toll Free 1(855) 495-0373

----- Forwarded message -----

From: **Spencer, Stephen** <stephen_spencer@ios.doi.gov>

Date: Thu, Aug 18, 2016 at 1:44 PM

Subject: Incident Report # 1156565, # 1156568

To: Mosby Halterman <mosby.halterman@bia.gov>, Richard Winlock <Richard.Winlock@bia.gov>, Benjamin Daniels <benjamin.daniels@bia.gov>, Lee Burnett <lee.burnett@bia.gov>, Mark Hendricks <mark.hendricks@bia.gov>, Suzanne Dunn <suzanne_dunn@fws.gov>, Todd Adomato <Todd_Adomato@fws.gov>, Jonathan Fisher <jonathan_fisher@fws.gov>, John Nelson <John_Nelson@ios.doi.gov>

NATIONAL RESPONSE CENTER 1-800-424-8802

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Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 1156568

INCIDENT DESCRIPTION

*Report taken by: YN2 RUDY GANTHER at 17:15 on 17-AUG-16

Incident Type: UNKNOWN SHEEN

Incident Cause: UNKNOWN

Affected Area: SMALL CREEK

Incident was discovered on 17-AUG-16 at 10:30 local incident time.

Affected Medium: WATER SMALL CREEK

REPORTING PARTY

Name: JOE NAVE

Organization: BIA

OSAGE, OK

Email Address: joe.nave@bia.gov

PRIMARY Phone: (918)6371035

Type of Organization: FEDERAL GOVERNMENT

SUSPECTED RESPONSIBLE PARTY

Name: UNKNOWN

8/29/2016

DEPARTMENT OF THE INTERIOR Mail - Fwd: Incident Report # 1156565, # 1156568

XX

INCIDENT LOCATION

SEE LEGAL DESCRIPTION County: OSAGE

State: OK

Section: 12 Township: 27 Range: 7

UNKNOWN SHEEN INCIDENT

RELEASED MATERIAL(S)

CHRIS Code: DZB Official Material Name: DRILLING BRINE (WITH ZINC SALTS)

Also Known As:

Qty Released: 0 UNKNOWN AMOUNT Qty in Water: 0 UNKNOWN AMOUNT

CHRIS Code: OUN Official Material Name: UNKNOWN OIL

Also Known As:

Qty Released: 1 BARREL(S) Qty in Water: 1 BARREL(S)

DESCRIPTION OF INCIDENT

///THIS IS AN UPDATE TO REPORT 1156565///

CALLER REPORTED A SPILL OF AN ESTIMATED ON BARREL OF AN UNKNOWN OIL FROM AN UNKNOWN SOURCE TO A CREEK.

THE CALLER ALSO DETERMINED THAT THERE WAS A SPILL OF SALT WATER TO THE CREEK. THE SALT WATER HAS AFFECTED AT LEAST TWO MILES OF THE CREEK.

SENSITIVE INFORMATION

INCIDENT DETAILS

Platform Rig Name:

Platform Letter:

Location Area ID:

Location Block ID:

OCSG Number:

OCSP Number:

State Lease Number:

Pier Dock Number:

Berth Slip Number:

—SHEEN INFORMATION—

Sheen Color: DARK BLACK

Sheen Odor Description:

Sheen Travel Direction:

Sheen Size Length: 1 MILES

Sheen Size Width:

—WATER INFORMATION—

Body of Water: SMALL CREEK

Tributary of:

Nearest River Mile Marker:

Water Supply Contaminated: UNKNOWN

IMPACT

Fire Involved: NO Fire Extinguished: UNKNOWN

INJURIES: NO Hospitalized: Empl/Crew: Passenger:

FATALITIES: NO Empl/Crew: Passenger: Occupant:

EVACUATIONS:NO Who Evacuated: Radius/Area:

8/29/2016

DEPARTMENT OF THE INTERIOR Mail - Fwd: Incident Report # 1156565, # 1156568

Damages: NO

	Hours	Direction of
Closure Type Description of Closure		Closed Closure
N		
Air:		
N		Major
Road:		Artery:N
N		
Waterway:		
N		
Track:		

Environmental Impact: UNKNOWN

Media Interest: UNKNOWN Community Impact due to Material:

REMEDIAL ACTIONS

Release Secured: UNKNOWN

Release Rate:

Estimated Release Duration:

WEATHER

Weather: PARTLY CLOUDY, °F

ADDITIONAL AGENCIES NOTIFIED

Federal: BIA

State/Local:

State/Local On Scene:

State Agency Number:

NOTIFICATIONS BY NRC

CENTERS FOR DISEASE CONTROL (GRASP)

17-AUG-16 17:27 (770)4887100

DHS NOC (NOC)

17-AUG-16 17:27 (202)2828114

COLORADO INFO ANALYSIS CENTER (FUSION CENTER)

17-AUG-16 17:27 (720)8526705

DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)

17-AUG-16 17:27 (202)3661863

U.S. EPA VI (MAIN OFFICE)

(866)3727745

KANSAS INTEL FUSION CENTER (US DHS I&A, SLPO)

17-AUG-16 17:27 (307)2861092

NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)

17-AUG-16 17:27 (202)2829201

NOAA RPTS FOR OK (MAIN OFFICE)

17-AUG-16 17:27 (206)5264911

NATIONAL RESPONSE CENTER HQ (AUTOMATIC REPORTS)

17-AUG-16 17:27 (202)2671136

OFC OF ENV SVC CHEROKEE NATIONS OK (MAIN OFFICE)

17-AUG-16 17:27 (918)4585496

OKLAHOMA INFORMATION FUSION CENTER (FUSION COMMAND CENTER)

17-AUG-16 17:27 (405)8792608

REPORTING PARTY (RP SUBMITTER)

17-AUG-16 17:27

SECTOR LOWER MISSISSIPPI RIVER (AUTO NRC NOTIFICATIONS)

17-AUG-16 17:27 (225)2985400

DEQ OKLAHOMA (MAIN OFFICE)

17-AUG-16 17:27 (405)7026206

USCG DISTRICT 8 (MAIN OFFICE)

17-AUG-16 17:27 (504)5896225

8/29/2016

DEPARTMENT OF THE INTERIOR Mail - Fwd: Incident Report # 1156565, # 1156568

ADDITIONAL INFORMATION

///THIS IS AN UPDATE TO REPORT 1156565///

*** END INCIDENT REPORT #1156568 ***

Report any problems by calling 1-800-424-8802

PLEASE VISIT OUR WEB SITE AT <http://www.nrc.uscg.mil>

NATIONAL RESPONSE CENTER 1-800-424-8802

GOVERNMENT USE ONLYGOVERNMENT USE ONLY***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 1156565

INCIDENT DESCRIPTION

*Report taken by: CIV BRENT TALIAFERRO at 16:57 on 17-AUG-16

Incident Type: UNKNOWN SHEEN

Incident Cause: UNKNOWN

Affected Area: SMALL CREEK

Incident was discovered on 17-AUG-16 at 10:30 local incident time.

Affected Medium: WATER SMALL CREEK

REPORTING PARTY

Name: JOE NAVE

Organization: BIA
OSAGE, OK

PRIMARY Phone: (918)6371035

Type of Organization: STATE GOVERNMENT

SUSPECTED RESPONSIBLE PARTY

Name: UNKNOWN

XX

INCIDENT LOCATION

LEGAL County: OSAGE

State: OK

Section: 12 Township: 27 Range: 7

UNKNOWN SHEEN INCIDENT

RELEASED MATERIAL(S)

CHRIS Code: OUN Official Material Name: UNKNOWN OIL

Also Known As:

Qty Released: 1 BARREL(S) Qty in Water: 1 BARREL(S)



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	August 16, 2016		
Media:	SDWA Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	NO-NAME OSAGE (SE 11-25-11)		
Facility Name:	Unknown		
Facility Physical Location:	SE/4, Sec. 12, T , R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent Sanborn	6EN-WR	9185571615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=ksanborn.kent@epa.gov, c=US Date: 2016.09.13 09:42:56 -05'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE DN: cn=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.09.21 07:56:02 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

NO-NAME OSAGE (SE 11-25-11) / Unknown
August 16, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent Sanborn visited the NO-NAME OSAGE (SE 11-25-11) oil production facility located in the Latitude: 36.8322, Longitude: -96.4984 near Pawhuska, Oklahoma on August 16, 2016. No representative of NO-NAME OSAGE (SE 11-25-11) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

A discharge of produced wastewater and oil were identified into Bird Creek. The point of discharge was unknown at the time of the inspection. The nearby operators are Grayhorse Operating, Jireh Resources, and Warren American Oil Company. The EPA has coordinated with representatives from each company to inform them of the situation regarding the containments in Bird Creek.

Section II - OBSERVATIONS

At the time of the inspection, brine and some oil were discovered in Bird Creek. A Total Soluble Salts (TSS) reading of over 80,000 ppm was present at the CR 4550 bridge along Bird Creek. Flowpaths, seepage, or other potential surface indications of a leak, were not observed. Nearby pipelines were tested by the local pipeline company, or associated responsible parties and passed the tests, verifying that the pipelines were not leaking. Another potential source of the wastewater could be a possible dumping from a tank truck from the county road. There were several nearby injection wells that are under review and need to potentially be tested to verify the wells are working properly and have no leaks. Also, during the inspection, there was a nearby dry hole that could not be located, and the EPA coordinated with the Bureau of Indian Affairs (BIA) to gather locational information for this facility. Produced water has flowed about 4 miles downstream along Bird Creek, north of the City of Pawhuska. Nearby operators are Grayhorse Operating, Jireh Resources, and Warren American.

Section III - AREAS OF CONCERN

At the time of the inspection, a source for the contaminated wastewater, including produced water and oil, was not identified. The produced water had a TSS reading of over 80,000 ppm in Bird Creek.

Section IV - FOLLOW UP

A follow-up inspection will be needed to track any changes to Bird Creek, as well as to find the source of the containments getting into Bird Creek.

Section V - LIST OF APPENDICES

There are no attachments to this report.

Metadata	Title:	NO-NAME OSAGE (SE 11-25-11)
	Author:	US EPA Region 6 Compliance Assurance and Enforcement Division Dallas TX
	Subject:	Safe Drinking Water Act SDWA
	Keywords:	Underground Injection Control Groundwater Brine Injection Well Oil Gas

18-16-16

⑥ (X) Saltwater spill / Discharge
ON UNLEASED land - OSAGE CO, OK
TSS @ Bridge is over 80K
and falls to 1500 ppm ~ 2 1/2 miles
South.

SE 12-27-7 < panhandle >

✓ 80K - 36.8322, -96.4984
8200 @ 36.8164, -96.4953

- Report of SW problems @ Gray Horse
op. lease
- w/o rig 1/2 mile N. of location
- NO signs of wells leaking or
pipe lines leaking.
- possible dumping @ Bridge.

BASS Bros. Ranch

918-977-0607 Brady Wallace

918-440-1381 Dan Carpenter.

no activity.

soil samples were taken per operator

⑧ Gray horse oil. 918-582-9201

OSAGE B lease, OS CO, OK <ptulurloc>

NW 18-27-8

- TB @ 36.824405, -96.486825
clay-oil/sw staining

✓ - OSAGE B #15 SWD 36.825437
-96.489567
NW 18-27-8



055258

- injecting @ ? ~500 - need diff. gauge
- gun open - air



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	August 18, 2016		
Media:	SDWA Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Grayhorse Energy, LLC		
Facility Name:	Osage B Lease (Osage B #15 SWD) No.OS 5258		
Facility Physical Location:	NW/4, Sec. 18, T , R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	20 E 5th St. #320		
(city, state, zip code)	Tulsa, OK 74103		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent Sanborn	6EN-WR	9185571615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	 Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.09.13 09:25:25 -05'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	 WILLIE LANE <small>Digitally signed by WILLIE LANE DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.09.21 07:46:32 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Grayhorse Energy, LLC / Osage B Lease (Osage B #15 SWD) No.OS 5258
August 18, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent Sanborn visited the Grayhorse Energy, LLC oil production facility located in the Latitude: 36.824405, Longitude: -96.486825 near Pawhuska, Oklahoma on August 18, 2016. No representative of Grayhorse Energy, LLC was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

An injection well located on the Osage B Lease.

Section II - OBSERVATIONS

At the time of the inspection, the well was injecting. The fluid was contaminated at the surface. The gauge associated to the injection well needs to be inspected, and was improperly working at the time of the inspection. I spoke to the operator concerning the well, and the operator stated that the well was on a vacuum. At the time of the inspection the annulus was open. Also, the well reportedly had a pressure problem, but I was not able to verify this at the time of the inspection.

Section III - AREAS OF CONCERN

The gauge on the injection well was improperly working at the time of the inspection. The injection well has had potential problems and this facility will be referred to the EPA Region 6 - Osage UIC program.

Section IV - FOLLOW UP

A potential follow-up inspection to be done, if needed, in approximately two weeks.

Section V - LIST OF APPENDICES



There are no attachments to this report.

Metadata	Title:	Grayhorse Energy, LLC
	Author:	US EPA Region 6 Compliance Assurance and Enforcement Division Dallas TX
	Subject:	Safe Drinking Water Act SDWA
	Keywords:	Underground Injection Control Groundwater Brine Injection Well Oil Gas



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	August 22, 2016		
Media:	SDWA Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Jireh Resources, LLC		
Facility Name:	McComb 18W SWD (No. OS 6320)		
Facility Physical Location:	SW/4, Sec. 1, T, R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	2526 E 71st St., Suite A		
(city, state, zip code)	Tulsa, OK 74136		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent Sanborn	6EN-WR	9185571615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	 Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.09.13 09:34:21 -05'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	 WILLIE LANE <small>Digitally signed by WILLIE LANE DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.09.21 07:48:39 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Jireh Resources, LLC / McComb 18W SWD (No. OS 6320)
August 22, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent Sanborn visited the Jireh Resources, LLC oil production facility located in the Latitude: 36.841008, Longitude: -96.504838 near Pawhuska, Oklahoma on August 22, 2016. No representative of Jireh Resources, LLC was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

An injection well located in Osage County.

Section II - OBSERVATIONS

At the time of the inspection, the injection well was being worked over. The hole in the casing was around 900 feet down according to a representative. Also, according to the representative, a new 4.5 inch casing liner and cement to surface will be used. At the time of the inspection, the company was waiting on the well work over rig to assist in the well work over process.

Section III - AREAS OF CONCERN

Injection operations occurred for a while until the hole in the casing of the well was discovered. And the long string was reportedly cemented to surface. The injection well has had potential problems and this facility will be referred to the EPA Region 6 - Osage UIC program.

Section IV - FOLLOW UP

A potential follow-up inspection to be done, if needed, in approximately two weeks.

Section V - LIST OF APPENDICES

There are no attachments to this report.

Metadata	Title:	Jireh Resources, LLC
	Author:	US EPA Region 6 Compliance Assurance and Enforcement Division Dallas TX
	Subject:	Safe Drinking Water Act SDWA
	Keywords:	Underground Injection Control Groundwater Brine Injection Well Oil Gas



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	August 22, 2016		
Media:	SDWA Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Jireh Resources, LLC		
Facility Name:	McComb Tank Battery		
Facility Physical Location:	SW/4, Sec. 1, T, R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	2526 E 71st St., Suite A		
(city, state, zip code)	Tulsa, OK 74136		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent Sanborn	6EN-WR	9185571615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	 Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.09.13 09:35:45 -05'00'		
	Kent Sanborn		Date
Supervisor Signature/Date	 Digitally signed by WILLIE LANE DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.09.21 07:50:37 -05'00'		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Jireh Resources, LLC / McComb Tank Battery
August 22, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent Sanborn visited the Jireh Resources, LLC oil production facility located in the Latitude: 36.846536, Longitude: -96.506097 near Pawhuska, Oklahoma on August 22, 2016. No representative of Jireh Resources, LLC was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

I observed 3- approximately 200 barrels each storage tanks, 1- approximately 250 barrels fiberglass brine storage tank, and a horizontal separator. At the time of the inspection, I also observed a brine injection pump.

Section II - OBSERVATIONS

At the time of the inspection, there was produced water and oil in the lined pit and no visible actions being taken to remove the fluids from the lined pit. At the time of the inspection, there was no observable sump pump process to remove the fluids from inside the secondary containment to the fluids disposal system.

Section III - AREAS OF CONCERN

There were fluids inside the lined pit, including produced water and oil.

Section IV - FOLLOW UP

A potential follow-up inspection to be done, if needed, in approximately two weeks.

Section V - LIST OF APPENDICES

There are no attachments to this report.

Metadata	Title:	Jireh Resources, LLC
	Author:	US EPA Region 6 Compliance Assurance and Enforcement Division Dallas TX
	Subject:	Safe Drinking Water Act SDWA
	Keywords:	Underground Injection Control Groundwater Brine Injection Well Oil Gas

18-22-16

⑨ Jireh Resources LLC
McCumb TS. 918-287-2339
OS CO, OK <PAULHURST>
SW1-27-7.

✓ 36.846536, -96.506097
- 3-200', 1-250 BBL FG SW TANK, 1-200 BBL

- SW/OIL/WATER IN LINED PIT
- NO SUMP PUMP. SW PUMP, NOT WORKING.
- NEED TO EMPTY PIT ON WEST END



⑩ Jireh Resources LLC
McCumb 18W SWD
OS 0320 - BEING WORKED OVER -
NOT CONNECTED
✓ SW1-27-7 OSAGE CO, OK <PAULHURST>
"hole in casing" now fixed.
918-287-2339 RIG NOW GONE.
36.841008, -96.504838

⑪ PINNACLE OP CO LLC
11-27-21-13 918-492-0809



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	September 13, 2016		
Media:	brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	No-Name Osage County (SE 11-25-11)		
Facility Name:	Bird Creek Spill		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	 <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.09.29 18:08:09 -05'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	 <small>Digitally signed by WILLIE LANE DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.09.30 10:33:51 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

No-Name Osage County (SE 11-25-11) / Bird Creek Spill
September 13, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn visited the No-Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.832308, Longitude: -96.49798 near Pawhuska, on September 13, 2016. No representative of No-Name Osage County (SE 11-25-11) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

A follow up inspection of the Bird Creek area was conducted to document changes to Bird Creek in salinity levels, and to document the source of the containments in the creek.

Section II - OBSERVATIONS

At the time of the inspection, Bird Creek still had brine fluids that measured over 80,000 parts-per-million (ppm) in Total Soluble Salts (TSS) at the County Road 4550 bridge. There were other inspectors on site utilizing the Ohm-mapper tool to track the sources of the contaminants in the area, please refer to that inspection report for the documented observations that occurred during that inspection. At the time of the inspection, the source of the brine in Bird Creek was unknown.

Section III - AREAS OF CONCERN

There continue to be over 80,000 ppm TSS readings in Bird Creek and there was not a known point of discharge at the time of the inspection.

Section IV - FOLLOW UP

Conduct follow up inspections weekly.

Section V - LIST OF APPENDICES

There are no attachments to this report.

19-13-16

(22) NO-NAME

Brine

OS. Co. OK. Bird Creek Spill

36.832308, - 96.497980

✓ TSS = 80K Today @ bridge.

- OHM-Mapper project.

SOME RAIN IN THE PAST WEEKEND

OIL RING SOME



**Region 6 Compliance Assurance and Enforcement Division
AMENDED INSPECTION REPORT**

Inspection Date(s):	10/05/2016		
Media:	Brine		
Regulatory Program(s)	SDWA - Oil and Gas, Produced/Brine Water		
Company Name:	Unknown		
Facility Name:	Unknown (Bird Creek)		
Facility Physical Location:	36.8322 N, -96.4984 W		
(city, state, zip code)	Pawhuska, Oklahoma 74056		
Mailing address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage County		
Facility Contact:	Unknown	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	211111		
SIC:	1311		
Personnel participating in inspection:			
Kent W. Sanborn	6EN-WR	Environmental Engineer	(918) 557 - 1615
EPA Lead Inspector Signature/Date	<i>Kent W Sanborn</i>		
	Kent W. Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE Date: 2017.08.17 11:28:36 -05'00'</small>		
	Willie Lane		Date

Unknown – Unknown (Bird Creek)

Inspection date: 10/05/2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations. The purpose of the inspection was to determine if the facility was in compliance with Section 301 of the Clean Water Act (CWA) and to identify and document discharges of produced wastewater (brine) to waters of the United States. The inspection was conducted under the authority of Section 308 of the CWA. EPA Region 6 inspector Kent W. Sanborn visited the No-Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.8322, Longitude: -96.4984 near Pawhuska, Oklahoma on October 5, 2016. Representatives from nearby oil and gas operating companies were present. Also, landowner representatives and the Oklahoma Department of Environmental Quality (ODEQ) were present. This inspection was a follow up inspection to previous inspections in the area.

I also met with the landowner, an Oklahoma Department of Environmental Quality (ODEQ), and representatives from Jireh Resources, LLC. and Grayhorse Operating, Inc. (which represented Novy Oil and Gas, Inc.). The meeting discussed the previous inspections and the current inspection with the two oil and gas operators and the landowners.

FACILITY DESCRIPTION

The tributary assessment and water quality assessment was conducted near the Chapman Ranch on the Blackland lease. The inspection was conducted along the tributary of North Bird Creek was located near Pawhuska, Osage County, Oklahoma. The area of concern is located at latitude 36.8322 N and longitude -96.4984 W.

Section II – OBSERVATIONS

With a calibrated YSI 30 Conductivity Meter, I measured readings of Total Dissolved Solids (TDS) in the tributary of North Bird Creek, near the area of concern.

Also, I took five water quality grab samples during the inspection to for analysis at the Oklahoma State University (OSU) lab. The coordinates for where each water quality grab sample was taken at:

- Tributary Water Grab Samples:
 - 1A (36.83266 N, -96.496177 W), taken upstream from the first area identified with elevated levels of TDS
 - 1B (36.832135 N, -96.498664 W), taken at the area identified with elevated levels of TDS
 - 1C (36.832135 N, -96.498664 W), was a duplicate sample and was taken at the area identified with elevated levels of TDS
- Injected Fluid Grab Samples:
 - 2 (36.841008 N, -96.504838 W), taken at the Jireh Resources, LLC Well No. 18W (OS6320)
 - 3 (36.524405 N, -96.486825 W), taken at Novy Oil and Gas, Inc. tank battery which is associated with Well No. 15 (OS5258)

Unknown – Unknown (Bird Creek)
Inspection date: 10/05/2016

For the five sample analysis results, see Appendix 2.

This inspection report was previously finalized on 11/21/2016. An amended inspection report was produced to include additional appendices. See Appendix 3 for the pre-amended Inspection Report.

Section III – AREAS OF CONCERN

During the inspection, elevated levels of TDS continued to effect the tributary of North Bird Creek.

Section IV – FOLLOW UP

The following follow-up actions will be conducted:

- EPA conduct a follow up inspection

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 2 photos taken on 10/05/2016.

Appendix 2 – Water Quality Report from the Oklahoma State University lab and the Chain of Custody

Appendix 3 – Copy of pre-amended Inspection Report finalized on 11/21/2016.

Unknown – Unknown (Bird Creek Area)
Inspection date: 10/05/2016

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: 36.8322 N, -96.4984 W		
City: Pawhuska	County: Osage	State: Oklahoma



Photograph File Name: DSC_0014.JPG

Date of Photograph: 10/05/2016

Latitude: 36.8322 N

Longitude: -96.4984 W

Orientation: S

Map Datum: WGS-84

Time of Photo: 10:25 AM

Photographer: Kent Sanborn

Description: This image shows the meter measurement and temperature reading taken with a calibrated YSI 30 Conductivity meter at latitude 36.832135 N and longitude -96.498664 W. The temperature was 37.1 degrees C and the meter reading was 69,400 parts-per-million (ppm) salinity, which was approximately 45,110 ppm total dissolved solids (TDS).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: 36.8322 N, -96.4984 W		
City: Pawhuska	County: Osage	State: Oklahoma



Photograph File Name: DSC_0015.JPG

Date of Photograph: 10/05/2016

Latitude: 36.83266 N

Longitude: -96.496177 W

Orientation: N

Map Datum: WGS-84

Time of Photo: 10:37 AM

Photographer: Kent Sanborn

Description: This image shows the meter measurement and temperature reading taken with a calibrated YSI 30 Conductivity meter at latitude 36.83266 N and longitude -96.496177 W. The temperature was 17.7 degrees C and the meter reading was 100 ppm salinity, which was approximately 65 ppm TDS.

Unknown – Unknown (Bird Creek)

Inspection date: 10/05/2016

Appendix 2

Water Quality Report



Soil, Water & Forage Analytical Laboratory

Oklahoma State University Division of Agricultural Sciences and Natural Resources
 045 Agricultural Hall
 Stillwater, OK 74078
 Email: soiltesting@okstate.edu
 Website: www.soiltesting.okstate.edu

WATER QUALITY REPORT

CARL E. WILLS (6EN-WR)
 CARL E WILLS (6EN-WR)
 US EPA REGION 6
 1445 ROSS AVE SUITE 1200
 DALLAS, TX 75202
 (214) 665-7276

Name : 1A-Upstream (North of Road)
 Location : Bird Creek (SE 12-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820711
 Customer Code : 1361
 Sample No. : 1
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Irrigation Water

----- Cations -----

Sodium (ppm)	17
Calcium (ppm)	47
Magnesium (ppm)	7
Potassium (ppm)	8

----- Anions -----

Nitrate-N (ppm)	<1
Chloride (ppm)	87
Sulfate (ppm)	35
Boron (ppm)	0.02
Bicarbonate (ppm)	56

----- Other -----

pH	7.5
EC (µmhos/cm)	454

----- Derived Values -----

Total Dissolved Salts (TDS in ppm)	299.6
Sodium Adsorption Ratio (SAR)	0.6
Potassium Adsorption Ratio (PAR)	0.2

----- Derived Values(cont'd) -----

Sodium Percentage	19.9 %
Hardness (ppm)	146.0
Hardness Class	Hard
Alkalinity (ppm as CaCO ₃)	45.6

INTERPRETATION AND REQUIREMENTS FOR *Irrigation Water*

The total dissolved salt and sodium content of this water are low enough that no problem should result from its use.

Kendal Henderson

Signature



Soil, Water & Forage Analytical Laboratory

Oklahoma State University Division of Agricultural Sciences and Natural Resources
 045 Agricultural Hall
 Stillwater, OK 74078
 Email: soiltesting@okstate.edu
 Website: www.soiltesting.okstate.edu

WATER QUALITY REPORT

CARL E. WILLS (6EN-WR)
 CARL E WILLS (6EN-WR)
 US EPA REGION 6
 1445 ROSS AVE SUITE 1200
 DALLAS, TX 75202
 (214) 665-7276

Name : 1A-Upstream (North of Road)
 Location : Bird Creek (SE 12-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820711
 Customer Code : 1361
 Sample No. : 1
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Livestock Water

Analysis	Sample Results	Livestock Water Limits
Boron (ppm)	0.02	< 5 ppm
Calcium (ppm)	47.33	No Guidelines
Chloride (ppm)	86.87	< 600 ppm
Copper (ppm)	<DL*	<0.5 ppm
Iron (ppm)	1.26	No Guidelines
Magnesium (ppm)	6.79	No Guidelines
Manganese (ppm)	0.01	No Guidelines
Nitrate-N (ppm)	0.64	< 100 ppm
Potassium (ppm)	8	No Guidelines
Sodium (ppm)	16.64	< 1000 ppm
Sulfate (ppm)	35.06	<1000 ppm
Zinc (ppm)	< DL*	< 25 ppm
EC (µmhos/cm)	454	No Guidelines
ICAP_P ppm	---	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	146.0	No Guidelines
Hardness Class	Hard	No Guidelines
pH	7.5	5.5-9.0
Total Dissolved Salts(TDS) (ppm)	299.6	<3000 ppm

* DL : Detection Limit

Kendal Henderson
 Signature



Soil, Water & Forage Analytical Laboratory

Oklahoma State University Division of Agricultural Sciences and Natural Resources
 045 Agricultural Hall
 Stillwater, OK 74078
 Email: soiltesting@okstate.edu
 Website: www.soiltesting.okstate.edu

WATER QUALITY REPORT

CARL E. WILLS (6EN-WR)
 CARL E WILLS (6EN-WR)
 US EPA REGION 6
 1445 ROSS AVE SUITE 1200
 DALLAS, TX 75202
 (214) 665-7276

Name : 1A-Upstream (North of Road)
 Location : Bird Creek (SE 12-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820711
 Customer Code : 1361
 Sample No. : 1
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Household Water

Analysis	Sample Results	EPA Drinking Water Limits
Boron (ppm)	0.02	< 2.4
Calcium (ppm)	47.33	No Guidelines
Chloride (ppm)	86.87	< 250 ppm (#)
Copper (ppm)	< DL*	<1.0 ppm (#)
Iron (ppm)	1.26	< 0.3 ppm (#)
Magnesium (ppm)	6.79	No Guidelines
Manganese (ppm)	0.01	< 0.05 ppm (#)
Nitrate-N (ppm)	0.64	< 10 ppm
Potassium (ppm)	8	No Guidelines
Sodium (ppm)	16.64	No Guidelines
Sulfate (ppm)	35.06	< 250 ppm (#)
Zinc (ppm)	< DL*	< 5.0 ppm (#)
EC (µmhos/cm)	454	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	146.0	No Guidelines
Hardness Class	Hard	< 120
pH	7.5	6.5 - 8.5 (#)
Sodium Percentage (%)	19.9	No Guidelines
Total Dissolved Solids (TDS) (ppm)	299.6	<500 ppm (#)

* DL : Detection Limit

(#) Secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects. If any of the above analysis exceeds EPA standards, you should seek advice from the Oklahoma Department of Environmental Quality or local Health Department.

This water analysis does NOT include testing for bacteria, organic chemicals, and heavy metals. This lab is not certified by DEQ for drinking water analysis.

Kendal Henderson
 Signature



Soil, Water & Forage Analytical Laboratory

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WATER QUALITY REPORT

CARL E. WILLS (6EN-WR)
 CARL E WILLS (6EN-WR)
 US EPA REGION 6
 1445 ROSS AVE SUITE 1200
 DALLAS, TX 75202
 (214) 665-7276

Name : 1B-Pool (South of Road)
 Location : Bird Creek (SE 12-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820712
 Customer Code : 1361
 Sample No. : 2
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Irrigation Water

----- Cations -----

Sodium (ppm)	20812
Calcium (ppm)	4751
Magnesium (ppm)	1365
Potassium (ppm)	58

----- Anions -----

Nitrate-N (ppm)	<1
Chloride (ppm)	40699
Sulfate (ppm)	49
Boron (ppm)	1.47
Bicarbonate (ppm)	61

----- Other -----

pH	6.9
EC (µmhos/cm)	99500

----- Derived Values -----

Total Dissolved Salts (TDS in ppm)	67795.3
Sodium Adsorption Ratio (SAR)	68.5
Potassium Adsorption Ratio (PAR)	0.1

----- Derived Values(cont'd) -----

Sodium Percentage	72.2 %
Hardness (ppm)	17470.8
Hardness Class	Very Hard
Alkalinity (ppm as CaCO ₃)	49.8

INTERPRETATION AND REQUIREMENTS FOR *Irrigation Water*

Water of this quality is not recommended for crop irrigation due to its high total dissolved salts and/or sodium level.

Boron toxicity may occur in poorly drained soils.

Kendal Henderson

Signature



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Name : 1B-Pool (South of Road)
 Location : Bird Creek (SE 12-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820712
 Customer Code : 1361
 Sample No. : 2
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Livestock Water

Analysis	Sample Results	Livestock Water Limits
Boron (ppm)	1.47	< 5 ppm
Calcium (ppm)	4751.23	No Guidelines
Chloride (ppm)	40699	< 600 ppm
Copper (ppm)	0.10	< 0.5 ppm
Iron (ppm)	0.1	No Guidelines
Magnesium (ppm)	1365.04	No Guidelines
Manganese (ppm)	0.02	No Guidelines
Nitrate-N (ppm)	0.14	< 100 ppm
Potassium (ppm)	58	No Guidelines
Sodium (ppm)	20812.1	< 1000 ppm
Sulfate (ppm)	48.98	<1000 ppm
Zinc (ppm)	0.01	< 25 ppm
EC (µmhos/cm)	99500	No Guidelines
ICAP_P ppm	---	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	17470.8	No Guidelines
Hardness Class	Very Hard	No Guidelines
pH	6.9	5.5-9.0
Total Dissolved Salts(TDS) (ppm)	67795.3	<3000 ppm

* DL : Detection Limit

This water may be objectionable because it is less than the guideline of 1000mg Na/L.

Serious effects including death become likely at 5000mg/L. We recommend keeping drinking water Na concentration less than 1000mg/L(chronic exposure criteria). This assumes normal feedstuff Na concentration and no other water sources; these concentrations should protect against acute lethality or chronically poor performance. Short term exposure(days-weeks) should not exceed 4000 mg Na/L

This water may be objectionable because it exceeds the guideline of 600mg Chloride/L

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Name : 1B-Pool (South of Road)
 Location : Bird Creek (SE 12-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820712
 Customer Code : 1361
 Sample No. : 2
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Household Water

Analysis	Sample Results	EPA Drinking Water Limits
Boron (ppm)	1.47	< 2.4
Calcium (ppm)	4751.23	No Guidelines
Chloride (ppm)	40699	< 250 ppm (#)
Copper (ppm)	0.10	< 1.0 ppm (#)
Iron (ppm)	0.1	< 0.3 ppm (#)
Magnesium (ppm)	1365.04	No Guidelines
Manganese (ppm)	0.02	< 0.05 ppm (#)
Nitrate-N (ppm)	0.14	< 10 ppm
Potassium (ppm)	58	No Guidelines
Sodium (ppm)	20812.1	No Guidelines
Sulfate (ppm)	48.98	< 250 ppm (#)
Zinc (ppm)	0.01	< 5.0 ppm (#)
EC (µmhos/cm)	99500	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	17470.8	No Guidelines
Hardness Class	Very Hard	< 120
pH	6.9	6.5 - 8.5 (#)
Sodium Percentage (%)	72.2	No Guidelines
Total Dissolved Solids (TDS) (ppm)	67795.3	<500 ppm (#)

* DL : Detection Limit

(#) Secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects. If any of the above analysis exceeds EPA standards, you should seek advise from the Oklahoma Department of Environmental Quality or local Health Department.

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Name : 1C-Duplicate(South of Road)
 Location : Bird Creek (SE 12-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820713
 Customer Code : 1361
 Sample No. : 3
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Irrigation Water

----- Cations -----

Sodium (ppm)	20810
Calcium (ppm)	4749
Magnesium (ppm)	1432
Potassium (ppm)	62

----- Anions -----

Nitrate-N (ppm)	<1
Chloride (ppm)	42655
Sulfate (ppm)	51
Boron (ppm)	1.59
Bicarbonate (ppm)	64

----- Other -----

pH	6.9
EC (µmhos/cm)	100100

----- Derived Values -----

Total Dissolved Salts (TDS in ppm)	69821.9
Sodium Adsorption Ratio (SAR)	68.0
Potassium Adsorption Ratio (PAR)	0.1

----- Derived Values(cont'd) -----

Sodium Percentage	71.8 %
Hardness (ppm)	17741.4
Hardness Class	Very Hard
Alkalinity (ppm as CaCO3)	52.1

INTERPRETATION AND REQUIREMENTS FOR *Irrigation Water*

Water of this quality is not recommended for crop irrigation due to its high total dissolved salts and/or sodium level.

Boron toxicity may occur in poorly drained soils.

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Name : 1C-Duplicate(South of Road)
 Location : Bird Creek (SE 12-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820713
 Customer Code : 1361
 Sample No. : 3
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Livestock Water

Analysis	Sample Results	Livestock Water Limits
Boron (ppm)	1.59	< 5 ppm
Calcium (ppm)	4748.7	No Guidelines
Chloride (ppm)	42655	< 600 ppm
Copper (ppm)	0.10	< 0.5 ppm
Iron (ppm)	0.1	No Guidelines
Magnesium (ppm)	1432.35	No Guidelines
Manganese (ppm)	<DL*	No Guidelines
Nitrate-N (ppm)	0.13	< 100 ppm
Potassium (ppm)	62	No Guidelines
Sodium (ppm)	20809.6	< 1000 ppm
Sulfate (ppm)	50.51	<1000 ppm
Zinc (ppm)	0.01	< 25 ppm
EC (µmhos/cm)	100100	No Guidelines
ICAP_P ppm	---	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	17741.4	No Guidelines
Hardness Class	Very Hard	No Guidelines
pH	6.9	5.5-9.0
Total Dissolved Salts(TDS) (ppm)	69821.9	<3000 ppm

* DL : Detection Limit

This water may be objectionable because it is less than the guideline of 1000mg Na/L.

Serious effects including death become likely at 5000mg/L. We recommend keeping drinking water Na concentration less than 1000mg/L(chronic exposure criteria). This assumes normal feedstuff Na concentration and no other water sources; these concentrations should protect against acute lethality or chronically poor performance. Short term exposure(days-weeks) should not exceed 4000 mg Na/L

This water may be objectionable because it exceeds the guideline of 600mg Chloride/L

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Name : 1C-Duplicate(South of Road)
 Location : Bird Creek (SE 12-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820713
 Customer Code : 1361
 Sample No. : 3
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Household Water

Analysis	Sample Results	EPA Drinking Water Limits
Boron (ppm)	1.59	< 2.4
Calcium (ppm)	4748.7	No Guidelines
Chloride (ppm)	42655	< 250 ppm (#)
Copper (ppm)	0.10	< 1.0 ppm (#)
Iron (ppm)	0.1	< 0.3 ppm (#)
Magnesium (ppm)	1432.35	No Guidelines
Manganese (ppm)	< DL*	< 0.05 ppm (#)
Nitrate-N (ppm)	0.13	< 10 ppm
Potassium (ppm)	62	No Guidelines
Sodium (ppm)	20809.6	No Guidelines
Sulfate (ppm)	50.51	< 250 ppm (#)
Zinc (ppm)	0.01	< 5.0 ppm (#)
EC (µmhos/cm)	100100	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	17741.4	No Guidelines
Hardness Class	Very Hard	< 120
pH	6.9	6.5 - 8.5 (#)
Sodium Percentage (%)	71.8	No Guidelines
Total Dissolved Solids (TDS) (ppm)	69821.9	<500 ppm (#)

* DL : Detection Limit

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Name : 2-Jireh (@ Well 18W)
 Location : Bird Creek (SW 1-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820714
 Customer Code : 1361
 Sample No. : 4
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Irrigation Water

----- Cations -----

Sodium (ppm)	49111
Calcium (ppm)	9627
Magnesium (ppm)	1770
Potassium (ppm)	531

----- Anions -----

Nitrate-N (ppm)	<1
Chloride (ppm)	99594
Sulfate (ppm)	41
Boron (ppm)	8.54
Bicarbonate (ppm)	104

----- Other -----

pH	6.3
EC (µmhos/cm)	179600

----- Derived Values -----

Total Dissolved Salts (TDS in ppm)	160778.6
Sodium Adsorption Ratio (SAR)	120.7
Potassium Adsorption Ratio (PAR)	0.8

----- Derived Values(cont'd) -----

Sodium Percentage	77.3 %
Hardness (ppm)	31304.2
Hardness Class	Very Hard
Alkalinity (ppm as CaCO ₃)	85.1

INTERPRETATION AND REQUIREMENTS FOR *Irrigation Water*

Water of this quality is not recommended for crop irrigation due to its high total dissolved salts and/or sodium level.

This water is not recommended for irrigation use because of its high boron content.

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Name : 2-Jireh (@ Well 18W)
 Location : Bird Creek (SW 1-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820714
 Customer Code : 1361
 Sample No. : 4
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Livestock Water

Analysis	Sample Results	Livestock Water Limits
Boron (ppm)	8.54	< 5 ppm
Calcium (ppm)	9627.19	No Guidelines
Chloride (ppm)	99594	< 600 ppm
Copper (ppm)	0.10	< 0.5 ppm
Iron (ppm)	10.41	No Guidelines
Magnesium (ppm)	1770.4	No Guidelines
Manganese (ppm)	2.49	No Guidelines
Nitrate-N (ppm)	< DL *	< 100 ppm
Potassium (ppm)	531	No Guidelines
Sodium (ppm)	49110.8	< 1000 ppm
Sulfate (ppm)	41.26	<1000 ppm
Zinc (ppm)	0.85	< 25 ppm
EC (µmhos/cm)	179600	No Guidelines
ICAP_P ppm	---	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	31304.2	No Guidelines
Hardness Class	Very Hard	No Guidelines
pH	6.3	5.5-9.0
Total Dissolved Salts(TDS) (ppm)	160778.6	<3000 ppm

* DL : Detection Limit

This water may be objectionable because it is less than the guideline of 1000mg Na/L.

Serious effects including death become likely at 5000mg/L. We recommend keeping drinking water Na concentration less than 1000mg/L(chronic exposure criteria). This assumes normal feedstuff Na concentration and no other water sources; these concentrations should protect against acute lethality or chronically poor performance. Short term exposure(days-weeks) should not exceed 4000 mg Na/L

This water may be objectionable for some livestock because it exceeds the guideline of 5mg Boron/L. Excess boron in the diets of livestock may decrease feed consumption and cause weight loss

This water may be objectionable because it exceeds the guideline of 600mg Chloride/L

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Name : 2-Jireh (@ Well 18W)
 Location : Bird Creek (SW 1-T27N-R7E)
 Osage County, OK

Lab ID No.: : 820714
 Customer Code : 1361
 Sample No. : 4
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Household Water

Analysis	Sample Results	EPA Drinking Water Limits
Boron (ppm)	8.54	< 2.4
Calcium (ppm)	9627.19	No Guidelines
Chloride (ppm)	99594	< 250 ppm (#)
Copper (ppm)	0.10	< 1.0 ppm (#)
Iron (ppm)	10.41	< 0.3 ppm (#)
Magnesium (ppm)	1770.4	No Guidelines
Manganese (ppm)	2.49	< 0.05 ppm (#)
NO3N (ppm)	< DL*	< 10 ppm
Potassium (ppm)	531	No Guidelines
Sodium (ppm)	49110.8	No Guidelines
Sulfate (ppm)	41.26	< 250 ppm (#)
Zinc (ppm)	0.85	< 5.0 ppm (#)
EC (µmhos/cm)	179600	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	31304.2	No Guidelines
Hardness Class	Very Hard	< 120
pH	6.3	6.5 - 8.5 (#)
Sodium Percentage (%)	77.3	No Guidelines
Total Dissolved Solids (TDS) (ppm)	160778.6	<500 ppm (#)

* DL : Detection Limit

(#) Secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects. If any of the above analysis exceeds EPA standards, you should seek advise from the Oklahoma Department of Environmental Quality or local Health Department.

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Name : 3-Grayhorse(@ Tank Battery)
 Location : Bird Creek (NW 18-T27N-R8E)
 Osage County, OK

Lab ID No.: : 820715
 Customer Code : 1361
 Sample No. : 5
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Irrigation Water

----- Cations -----

Sodium (ppm)	45675
Calcium (ppm)	8236
Magnesium (ppm)	1737
Potassium (ppm)	463

----- Anions -----

Nitrate-N (ppm)	<1
Chloride (ppm)	90403
Sulfate (ppm)	10
Boron (ppm)	8.11
Bicarbonate (ppm)	64

----- Other -----

pH	6.5
EC (µmhos/cm)	170900

----- Derived Values -----

Total Dissolved Salts (TDS in ppm)	146587.9
Sodium Adsorption Ratio (SAR)	119.4
Potassium Adsorption Ratio (PAR)	0.7

----- Derived Values(cont'd) -----

Sodium Percentage	78.2 %
Hardness (ppm)	27696
Hardness Class	Very Hard
Alkalinity (ppm as CaCO ₃)	52.0

INTERPRETATION AND REQUIREMENTS FOR *Irrigation Water*

Water of this quality is not recommended for crop irrigation due to its high total dissolved salts and/or sodium level.

This water is not recommended for irrigation use because of its high boron content.

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 Location : Bird Creek (NW 18-T27N-R8E)
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Lab ID No.: : 820715
 Customer Code : 1361
 Sample No. : 5
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Livestock Water

Analysis	Sample Results	Livestock Water Limits
Boron (ppm)	8.11	< 5 ppm
Calcium (ppm)	8236.48	No Guidelines
Chloride (ppm)	90403	< 600 ppm
Copper (ppm)	0.10	< 0.5 ppm
Iron (ppm)	2.96	No Guidelines
Magnesium (ppm)	1736.78	No Guidelines
Manganese (ppm)	2.40	No Guidelines
Nitrate-N (ppm)	< DL *	< 100 ppm
Potassium (ppm)	463	No Guidelines
Sodium (ppm)	45675	< 1000 ppm
Sulfate (ppm)	10.15	<1000 ppm
Zinc (ppm)	11.34	< 25 ppm
EC (µmhos/cm)	170900	No Guidelines
ICAP_P ppm	---	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	27696	No Guidelines
Hardness Class	Very Hard	No Guidelines
pH	6.5	5.5-9.0
Total Dissolved Salts(TDS) (ppm)	146587.9	<3000 ppm

* DL : Detection Limit

This water may be objectionable because it is less than the guideline of 1000mg Na/L.

Serious effects including death become likely at 5000mg/L. We recommend keeping drinking water Na concentration less than 1000mg/L(chronic exposure criteria). This assumes normal feedstuff Na concentration and no other water sources; these concentrations should protect against acute lethality or chronically poor performance. Short term exposure(days-weeks) should not exceed 4000 mg Na/L

This water may be objectionable for some livestock because it exceeds the guideline of 5mg Boron/L. Excess boron in the diets of livestock may decrease feed consumption and cause weight loss

This water may be objectionable because it exceeds the guideline of 600mg Chloride/L

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Name : 3-Grayhorse(@ Tank Battery)
 Location : Bird Creek (NW 18-T27N-R8E)
 Osage County, OK

Lab ID No.: : 820715
 Customer Code : 1361
 Sample No. : 5
 Received : 10/6/2016
 Report Date : 10/10/2016

Test Results for Household Water

Analysis	Sample Results	EPA Drinking Water Limits
Boron (ppm)	8.11	< 2.4
Calcium (ppm)	8236.48	No Guidelines
Chloride (ppm)	90403	< 250 ppm (#)
Copper (ppm)	0.10	< 1.0 ppm (#)
Iron (ppm)	2.96	< 0.3 ppm (#)
Magnesium (ppm)	1736.78	No Guidelines
Manganese (ppm)	2.40	< 0.05 ppm (#)
NO3N (ppm)	< DL*	< 10 ppm
Potassium (ppm)	463	No Guidelines
Sodium (ppm)	45675	No Guidelines
Sulfate (ppm)	10.15	< 250 ppm (#)
Zinc (ppm)	11.34	< 5.0 ppm (#)
EC (µmhos/cm)	170900	No Guidelines
Hardness (ppm, 17.1 ppm = 1 grain/gal)	27696	No Guidelines
Hardness Class	Very Hard	< 120
pH	6.5	6.5 - 8.5 (#)
Sodium Percentage (%)	78.2	No Guidelines
Total Dissolved Solids (TDS) (ppm)	146587.9	<500 ppm (#)

* DL : Detection Limit

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ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL
CHAIN OF CUSTODY RECORD

Customer ID: 1361

PROJ. NO.		PROJECT NAME		NO. OF CONTAINERS		REMARKS	
SAMPLERS: (Signature)		Kent Sanborn		NO. OF CONTAINERS		REMARKS	
STA. NO.		DATE	TIME	COMP.	GRAB	STATION LOCATION	REMARKS
1	10/5/16	11:02 AM	✓		1A (Upstream)	1	✓
2	10/5/16	11:18 AM	✓		1B (Pool)	1	✓
3	10/5/16	—	✓		1C (Replicate)	1	✓
4	10/5/16	12:01 PM	✓		2 (Tireh TB)	1	✓
5	10/5/16	12:46 PM	✓		3 (Grayhorse TB)	1	✓
N/A							
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Date / Time	
Shipped by: Drop-off		Airbill Number:		Date / Time		Remarks	
				10-5-16 13:00pm		NA Custody Seals Intact? Yes Samples Intact? Yes Samples less than or equal 4 deg C (water)	

EPA 7500-53
(11/96)

Distribution: White Accompanies Shipment; Pink to Coordinator Field Files;
Green to Report; Yellow Returns with Warrant

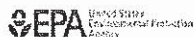
R6 - 0801

Unknown – Unknown (Bird Creek)

Inspection date: 10/05/2016

Appendix 3

Pre-Amended Finalized Inspection Report



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	October 5, 2016		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	No-Name Osage County (SE 11-25-11)		
Facility Name:	Unknown and Blackland Lease (Bird Creek)		
Facility Physical Location:	SE/4, Sec. 11, T , R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=ksanborn.kent@epa.gov, c=US Date: 2016.11.07 14:56:02 -05'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.11.21 13:16:05 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

No-Name Osage County (SE 11-25-11) / Unknown and Blackland Lease (Bird Creek)
October 5, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn visited the No-Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.8322, Longitude: -96.4984 near Pawhuska, Oklahoma on October 5, 2016. No representative of No-Name Osage County (SE 11-25-11) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

Bird Creek at Blackland Waterflood Lease.

Section II - OBSERVATIONS

At the time of the inspection, I took five water samples for analysis to the Oklahoma State University (OSU) in Stillwater, Oklahoma. I also met with the landowner, an Oklahoma Department of Environmental Quality (ODEQ), and representatives from Jireh Operating, LLC. and Grayhorse Operating, Inc. The meeting discussed the inspections.

Section III - AREAS OF CONCERN

At the time of the inspection, brine continues to affect the creek from an unknown source

Section IV - FOLLOW UP

Conduct a follow up inspection weekly to monitor the site and the creek.

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	October 5, 2016		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Jireh Resources, LLC		
Facility Name:	Blackland Unit		
Facility Physical Location:	SW/4, Sec. 1, T, R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	2526 E. 71st Street, Suite A		
(city, state, zip code)	Tulsa		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.11.07 14:55:06 -06'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE DN: cn=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=000007235 Date: 2016.11.21 13:09:17 -06'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Jireh Resources, LLC / Blackland Unit
October 5, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn visited the Jireh Resources, LLC oil production facility located in the Latitude: 36.841008, Longitude: -96.504838 near Pawhuska, Oklahoma on October 5, 2016. No representative of Jireh Resources, LLC was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

The facility consisted of the McComb 18W injection well, Permit No. OS 6320.

Section II - OBSERVATIONS

At the time of the inspection, I observed the McComb 18W well was injecting at 150 psi. I took a Total Soluble Salts (TSS) reading at the wellhead. The casing's liner had been run and cemented from top to bottom.

Section III - AREAS OF CONCERN

The injection well was injecting at high pressures.

Section IV - FOLLOW UP

Conduct a follow up inspection in approximately one month.

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	October 5, 2016		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Grayhorse Operating, Inc.		
Facility Name:	Osage B Lease		
Facility Physical Location:	NW/4, Sec. 18, T , R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	20 East 5th Street, Suite 320		
(city, state, zip code)	Tulsa		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou=email=sanborn.kent@epa.gov, c=US Date: 2016.11.07 14:53:03 -06'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.11.21 13:07:59 -06'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Grayhorse Operating, Inc. / Osage B Lease
October 5, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn visited the Grayhorse Operating, Inc. oil production facility located in the Latitude: 36.524405, Longitude: -96.486825 near Pawhuska, Oklahoma on October 5, 2016. No representative of Grayhorse Operating, Inc. was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

The facility consisted of the EPA injection well, Permit No. OS 5258.

Section II - OBSERVATIONS

At the time of the inspection, a brine sample was taken from the saltwater tank at tank battery. The containment pit was approximately 1/3 full of fluids, and a Total Soluble Salts (TSS) reading of 10,000 parts-per-million was taken from the fluids in the pit.

Section III - AREAS OF CONCERN

A the time of the inspection, the pit had brine stored in it. A recent flow path was observed near the tank battery.

Section IV - FOLLOW UP

Conduct a follow up inspection in approximately one month.

Section V - LIST OF APPENDICES

There are no attachments to this report.

~~110-6-16~~~~110-6-16~~ 10-5-16

(1) NO-NAME Bird Creek SITE

- TAKE 5 SAMPLES

2 - IN creek @ bridge (60,000 ppm)

1 - upstream (200 ppm)

2 - @ Grayhorse op and Torch op.

Meet w/ ODEQ, Landowners,

- Wilkine, J. Moore, K. Sandborn, B. Wallace,

M. Bersky - 36.8322, -96.4984

- No flow (TRICKLE) from recent rain

(2) Jireh Resources LLC

McComb 18 W SW D

OS 6320

Injecting @ 150 PSI

✓ TOOK SAMPLE of brine.

SW 1 - 27-7 OS. Co, OK < PAULHUSKA >

- ran 4 1/2 liner from Top to bottom

36.841.008, -96.504838

(3) Grayhorse op 918-382-9201

OSAGE B LEASE, OS. Co, OK < PAULHUSKA >

NW 18-27-8

✓ 36.824405, -96.486825 OS 5258

- pit 1/3 full of 10K PPM.

- TOOK brine sample.















Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	October 11, 2016		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	No-Name Osage County (SE 11-25-11)		
Facility Name:	Unknown and Blackland Unit (Bird Creek)		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.11.07 14:56:54 -06'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.11.21 13:10:33 -06'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

No-Name Osage County (SE 11-25-11) / Unknown and Blackland Unit (Bird Creek)
October 11, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn visited the No-Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.695133, Longitude: -96.366082 near Pawhuska, Oklahoma on October 11, 2016. No representative of No-Name Osage County (SE 11-25-11) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

A creek survey was conducted on Bird Creek to monitor the conditions.

Section II - OBSERVATIONS

At the time of the inspection, I monitored the creek conditions. I took a Total Soluble Salts (TSS) reading of 100 parts-per-million (ppm) approximately one mile north of the Pawhuska water plant. I monitored the creek conditions at the ranch road bridge near County Road 4450 and took a TSS reading of 55,000 ppm. Also, the temperature at the bottom layer of the creek of the fluids was 26.8 degrees Celsius (C). I took a TSS reading of 15,000 ppm at latitude 36.824742 N, longitude -96.499265 W and a temperature at 22.5 degrees C. I took a TSS reading of 55,000 ppm at latitude 36.8279 N, longitude -96.5016 W with temp of 21.5 degrees C.

Section III - AREAS OF CONCERN

Source of brine in the creek was unclear.

Section IV - FOLLOW UP

Monitor the conditions at the Bird Creek area weekly.

Section V - LIST OF APPENDICES

There are no attachments to this report.

1/0-11-16

(5) Bird Creek Brine Spill

@ 36.695133, -96.366086

TSS = 100ppm Cond 250

✓ Muddy water -

1 mile North of water plant.

Bottom is 80°F 26.8°C

Top is 68°F 20.5°C

TSS is up to 55K

Top is 500ppm

TSS @ 36.824742, -96.499265
is 15K - 22.5°C

TSS @ w 36.8279, -96.5016
55K Temp 21.5°C

= Average flow 5500 @ 21°C.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	October 18, 2016		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	No-Name Osage County (SE 11-25-11)		
Facility Name:	Unknown and Blackland (Bird Creek)		
Facility Physical Location:	SE/4, Sec. 25, T , R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.11.07 14:57:47 -06'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.11.21 13:11:07 -06'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

No-Name Osage County (SE 11-25-11) / Unknown and Blackland (Bird Creek)
October 18, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn visited the No-Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.8321, Longitude: -96.4979 near Pawhuska, Oklahoma on October 18, 2016. No representative of No-Name Osage County (SE 11-25-11) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

A creek survey was conducted on Bird Creek.

Section II - OBSERVATIONS

A creek survey was conducted. I observed Total Soluble Salts (TSS) readings along Bird Creek The TSS readings and locations the readings were taken:

Latitude 36.81668 N, Longitude -96.495657 W. TSS = 2,400 parts-per-million (ppm). Temperature=21 Degrees Celsius (C).

Latitude 36.8247 N, Longitude -96.4994 W. TSS=12,500 ppm. Temperature =26.5 Degrees C.

Latitude 36.8321 N, Longitude -96.4979 W. TSS=65,000 ppm. Temperature=33 Degrees C.

Section III - AREAS OF CONCERN

Brine was identified in the creek from an unknown source.

Section IV - FOLLOW UP

Monitor weekly to assess creek conditions.

Section V - LIST OF APPENDICES

There are no attachments to this report.

10-18-16

⑨ Bird Creek (S. of Gray horse op)

— @ 36.81668, -96.495657
TSS = 2400 ppm 21°C

✓ @ 36.8247, -96.4994
10K → 12.5K
Temp = 21.5°C → 26.5°C MAX
Flowing

— @ bridge 36.8321, -96.4979
highest TSS = 65K (29°C)
2nd hole 56K → 33°C
first corner = 18K - 26°C
Smell Brine - No oil.

most surface < 1' = 2-3K



minnows (new) top 6" only.

— creek coming from North = 400 ft
— 76°F today.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	October 20, 2016		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Warren American Oil Company		
Facility Name:	Blackland		
Facility Physical Location:	NE/4, Sec. 12, T , R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	6585 S. Yale, Suite 800		
(city, state, zip code)	Tulsa		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	 Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.11.07 15:02:44 -06'00'		
	Kent Sanborn		Date
Supervisor Signature/Date	 Digitally signed by WILLIE LANE DN: cn=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.11.21 13:15:31 -06'00'		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Warren American Oil Company / Blackland
October 20, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn visited the Warren American Oil Company oil production facility located in the Latitude: 36.843175, Longitude: -96.500638 near Pawhuska, Oklahoma on October 20, 2016. No representative of Warren American Oil Company was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

A injection well survey north of bird creek was conducted for possible fluid level measurements.

Section II - OBSERVATIONS

I conducted an Inspection of Temporarily Abandoned (TA) wells for possible fluid level measurements in the injection wells. The eight injection wells inspected included: 2B, 2, 1A, A-3, 1-C, 1-E, E-3, 2-E. Also in the SE 1 section, three additional injection wells inspected, included: B-9, B-6, 3B.

Section III - AREAS OF CONCERN

Elevated fluid levels were observed.

Section IV - FOLLOW UP

N/A

Section V - LIST OF APPENDICES

There are no attachments to this report.

10-20-16

(12) Warren American Oil Co. ⁹¹⁸ 846-2293

- TA producer (JACK)
36.843175, -96.500638

✓ Well 2-B

- TA well (A) TB 36.83935, -96.500082
bull plug - valve
Well # 2

- TA producer - Sucker Rod. 36.839447, -96.500597
Well 1-A NW12-27-7

- TA well, valve, no unit (new connections)
NW12-27-7 well (A-3)
36.839542, -96.498222

- TA well (1-C) NW12-27-7
36.839983, -96.502015

- TA well - New connections
36.839438, -96.502867
well (1-E) - NOT dry hole → map

- TA well (E-3) NW12-27-7
36.839363, -96.505067
Swabbed well.

- TA producer (2-E)
NW12-27-7
36.839260, -96.507285

- TA well (B-9) SE1-27-7 36.843333, -96.496148
valve, plug

- TA well (B-6) SE1-27-7 36.84477, -96.496145
valve, plug.


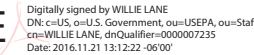
10-20-16

- TA well - valve
(3B) SW 1-27-7
36.845045, -96.500525
- Jireh McComb #6
SW 1-27-6
36.8431, -96.5027
- Jireh McComb #7
SW 1-27-6
36.84480, -96.502892



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	October 27, 2016		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	No-Name Osage County (SE 11-25-11)		
Facility Name:	Unknown (Bird Creek)		
Facility Physical Location:	SE/4, Sec. 25, T , R		
(city, state, zip code)	Pawhuska, OK		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	Kent W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn  <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.11.07 14:58:48 -06'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE  <small>Digitally signed by WILLIE LANE DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=WILLIE LANE, dnQualifier=0000007235 Date: 2016.11.21 13:12:22 -06'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

No-Name Osage County (SE 11-25-11) / Unknown (Bird Creek)
October 27, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector Kent W. Sanborn visited the No-Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.832, Longitude: -96.4996 near Pawhuska, Oklahoma on October 27, 2016. No representative of No-Name Osage County (SE 11-25-11) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

A creek survey of Bird Creek was conducted and I also assessed two private household water wells in the area of Bird Creek.

Section II - OBSERVATIONS

A creek survey of Bird Creek was conducted. A Total Soluble Salts (TSS) reading of 70,000 parts-per-million (ppm) was taken at the ranch road bridge near the County Road 4450. The max bottom layer temperature in Bird Creek that was taken was 38 degrees Celsius (C). Also, a field tests of the two private water wells in the area was assessed.

Check water wells:

House west: 300' deep. 800 ppm. 18.5 degrees C.

House east: 430' deep. 500 ppm. 18.8 degrees C.

Section III - AREAS OF CONCERN

There were elevated levels of TSS in Bird Creek Check creek for brine.

Section IV - FOLLOW UP

Continue to monitor Bird Creek and the surrounding area.

Section V - LIST OF APPENDICES

There are no attachments to this report.

10-27-16

(17)

Bird Creek

Kreskue

Bridge - 38°C on Bottom = 100°F
 20°C in Top 6".TSS from 70K \rightarrow 5K on

BEND. - 36.83203, -96.48168

- Bend South - TSS = 12K

@ 28°C (hole)- Surface 1200 ppm (6") 19°C

36.8320, -96.4996

2@ ~ 400' wells drilled

W. well @ west house

@ 36.833222, -96.504215

300' deep

RAW
10
minutes800 ppm 1500 conc. 18°C 700 ppm 1470 conc. 18.5°C

W. well east house 430' deep

TSS = 500 ppm

Cond = 978 Temp = 18.8°C

Crossing S. of East house

9300 ppm 25°C 4000 on top 19°C 49-51K $24-25^{\circ}\text{C}$ on Bottom 30°C @ 1' water

36.8246

7K water in

96.4996

4K out

10-27-16

Mixed, 4K $\frac{1}{4}$ mile South. fish
19°C

3200 PM 36.864 fish
19°C 96.4953



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	November 9, 2016		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	No-Name Osage County (SE 11-25-11)		
Facility Name:	Unknown (Bird Creek)		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	 Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=sanborn.kent@epa.gov, c=US Date: 2016.12.19 18:11:25 -06'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	 WILLIE LANE <small>Digitally signed by WILLIE LANE Date: 2016.12.22 12:11:34 -06'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

No-Name Osage County (SE 11-25-11) / Unknown (Bird Creek)
November 9, 2016

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W. Sanborn visited the No-Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.8323, Longitude: -96.4985 near Pawhuska, on November 9, 2016. No representative of No-Name Osage County (SE 11-25-11) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

A creek survey of Bird Creek was conducted. The point of entry location was not leased for oil production at the time of the inspection.

Section II - OBSERVATIONS

During the creek survey and monitoring, I measured salinity of Bird Creek with a calibrated YSI 30 Conductivity Meter. I measured Total Soluble Salts (TSS) in Bird Creek and found measurements ranging up to 65,000 parts-per-million (ppm) in Bird Creek at the time of the inspection.

Section III - AREAS OF CONCERN

At the time of the inspection, brine was still present in Bird Creek. The TSS concentrations varied by location and distance from the apparent discharge point of entry into Bird Creek. The

Section IV - FOLLOW UP

Conduct a follow up inspection in approximately one month.

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	January 3, 2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	No-Name Osage County (SE 11-25-11)		
Facility Name:	Unknown (Bird Creek)		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Pawhuska, Oklahoma		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou, email=ksanborn.kent@epa.gov, c=US Date: 2017.02.14 14:57:39 -06'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE Date: 2017.02.14 16:00:06 -06'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

No-Name Osage County (SE 11-25-11) / Unknown (Bird Creek)
January 3, 2017

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W. Sanborn visited the No-Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.83216, Longitude: -96.498037 near Pawhuska, on January 3, 2017. No representative of No-Name Osage County (SE 11-25-11) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

A creek survey of Bird Creek was conducted. The brine discharge site was located on a ranch property owned by the Bass Brothers north of Pawhuska.

Section II - OBSERVATIONS

During the creek survey of Bird Creek, a Total Soluble Salts (TSS) measurement was taken with a calibrated YSI 30 conductivity meter. The TSS was 4,900 parts-per-million (ppm) at latitude 36.817297N and longitude -96.495558W. A TSS readings between 29,000ppm and 37,000 ppm was taken at the bridge near the point of entry to Bird Creek. I observed no flow and there had been no rain recently at the time of the inspection.

Section III - AREAS OF CONCERN

At the time of the inspection, brine was still present in Bird Creek. The TSS concentrations varied by location and distance from the apparent discharge point of entry into Bird Creek.

Section IV - FOLLOW UP

Conduct a follow up inspection in approximately one month.

Section V - LIST OF APPENDICES

There are no attachments to this report.



**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	01/25/2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	No Name Osage County (SE 11-25-11)		
Facility Name:	Unknown (Bird Creek)		
Facility Physical Location:	SE 11-25N-11E		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact:	Unknown		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	211111		
SIC:	1311		
Personnel participating in inspection:			
Rick Davis	EPA, 6EN – WR	Inspector	(918) 605 – 1643
EPA Lead Inspector Signature/Date	Davis, Rickey <small>Digitally signed by Davis, Rickey DN: cn=Davis, Rickey, email=davis.rickey@epa.gov Date: 2017.03.21 13:22:35 -05'00'</small>		
	Rick Davis		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE Date: 2017.03.22 12:26:35 -05'00'</small>		
	Willie Lane		Date

Unknown – Unknown (Bird Creek)

Inspection date: 01/25/2017

Section I - INTRODUCTION**PURPOSE OF THE INSPECTION**

EPA Region 6 inspector Rick Davis visited the No Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.8322, Longitude: -96.4981 near Pawhuska, on January 25, 2017. No representative of the unknown company was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

The inspection consisted of a creek survey conducted near the bridge on the upper part of the tributary of North Bird Creek on Chapman Ranch.

Section II - OBSERVATIONS

At the time of the inspection, the tributary of North Bird Creek had running water within it from the north side of bridge, and at that location a Conductivity Meter reading of 200 parts-per-million (ppm) Total Soluble Salts (TSS) was taken. I observed that spring like waters were mixed on the south side of bridge along the tributary of North Bird Creek. A TSS reading of 40,000 ppm was taken at this south side bridge location and the temperature of the water was 57 degrees Fahrenheit. I observed that six inch in diameter and smaller bubbles were forming on the surface of the tributary, south of the bridge along the tributary of North Bird Creek, where there was mixing.

Section III – AREAS OF CONCERN

A TSS reading of 40,000 ppm was taken south of the bridge that was 57 degrees Fahrenheit. Also, I observed visible bubbles forming on the surface of the water.

Section IV – FOLLOW UP

Conduct a follow up inspection and continue tributary monitoring in area.

Section V – LIST OF APPENDICES

There are no attachments to this report.







Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	February 1, 2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	No Name Osage County (SE 11-25-11)		
Facility Name:	Unknown		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou=email-sanborn.kent@epa.gov, c=US Date: 2017.03.22 10:40:07 -05'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE Date: 2017.03.22 14:29:32 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

No Name Osage County (SE 11-25-11) / Unknown
February 1, 2017

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W. Sanborn visited the No Name Osage County (SE 11-25-11) oil production facility located in the Latitude: 36.8321, Longitude: -96.4979 near Pawhuska, on February 1, 2017. No representative of No Name Osage County (SE 11-25-11) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

I conducted a creek survey of the tributary of Bird Creek near the brine or contaminants entry point into the tributary.

Section II - OBSERVATIONS

I conducted a creek survey of a tributary of north Bird Creek. With a YSI 30 Conductivity Meter I took a total soluble salts (TSS) reading of 23,600 part per million (ppm) at the point of entry of containments into the tributary near the bridge. The temperature at the time of the reading was 13.5 C. Downstream from the bridge, a large pool of water was observed, at the first bend in the tributary downstream, south. A TSS reading of 22,800 ppm was taken and a water temperature of 15.6 C. I did not observe foam on the surface of the water along the tributary.

Section III - AREAS OF CONCERN

The TSS readings within the creek remain high readings of salinity.

Section IV - FOLLOW UP

Conduct a follow up inspection in approximately one month.

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	April 25, 2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Unknown		
Facility Name:	No Name (Bird Creek)		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	Bird Creek		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	Kent Sanborn <small>Digitally signed by Kent Sanborn DN: cn=Kent Sanborn, o=EPA, ou=email-sanborn.kent@epa.gov, c=US Date: 2017.06.08 13:34:27 -05'00'</small>		
	Kent Sanborn		Date
Supervisor Signature/Date	WILLIE LANE <small>Digitally signed by WILLIE LANE Date: 2017.06.12 09:17:43 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Unknown / No Name (Bird Creek)
April 25, 2017

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W. Sanborn visited the Unknown oil production facility located in the Latitude: 36.832291, Longitude: -96.498547 near Pawhuska, on April 25, 2017. No representative of Unknown was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

Bird Creek area of concern.

Section II - OBSERVATIONS

At the time of the inspection, with a calibrated YSI 30 Pro Conductivity Meter measured a Total Dissolved Solids (TDS) reading of 18,700 parts-per-million (ppm) was taken at culvert bridge and 1/2 mile south in deep hole (36.832291, -96.498547). A TDS reading of 45,000 ppm was taken approximately 1/2 mile south (36.827838, -96.501620).

Section III - AREAS OF CONCERN

High TDS readings in creek

Section IV - FOLLOW UP

Follow up as needed.

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	June 9, 2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Unknown (Bird Creek General Inspections)		
Facility Name:	Unknown (Bird Creek)		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	<i>Kent W Sanborn</i>		
	Kent Sanborn		Date
Supervisor Signature/Date	JACK ARIAS <small>Digitally signed by JACK ARIAS DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=JACK ARIAS, dnQualifier=0000035688 Date: 2017.08.30 12:23:41 -0500</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Unknown (Bird Creek General Inspections) / Unknown (Bird Creek)
June 9, 2017

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W. Sanborn visited the Unknown (Bird Creek General Inspections) oil production facility located in the Latitude: 36, Longitude: 96 near Pawhuska, on June 9, 2017. No representative of Unknown (Bird Creek General Inspections) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

Various Injections wells in the area of Bird Creek.

Section II - OBSERVATIONS

Verified wells that are shut in:

Warren: OS0920 B-7, OS0921 B-8, OS5133 B-9.

Grayhorse: OS5258 15, OS1420 21, OS6390 68.

Jireh: OS6320 18W, OS0922 9, OS0924 4W, OS6213 15.

Section III - AREAS OF CONCERN

None

Section IV - FOLLOW UP

None

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	June 12, 2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Jireh Resources, LLC		
Facility Name:	Blackland		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	2526 E. 71st St., Suite A		
(city, state, zip code)	Tulsa, Oklahoma 74136-5576		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W.Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	<i>Kent W Sanborn</i>		
	Kent Sanborn		Date
Supervisor Signature/Date	JACK ARIAS <small>Digitally signed by JACK ARIAS DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=JACK ARIAS, dnQualifier=0000035688 Date: 2017.08.30 12:16:22 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Jireh Resources, LLC / Blackland
June 12, 2017

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W.Sanborn visited the Jireh Resources, LLC oil production facility located in the Latitude: 36, Longitude: -96 near Pawhuska, on June 12, 2017. No representative of Jireh Resources, LLC was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

Various wells on the Blackland lease.

Section II - OBSERVATIONS

Fluid Levels:

18W--668'

4W--739', 5--650', 9--775', 12--710', 8--810', 16--550', 6--710', 7--cannot access, 17--916', 13--461', 7--(NW 21)--2240', 1--1119', 1B--1135', 15--769, 9--555'

Section III - AREAS OF CONCERN

None at this time.

Section IV - FOLLOW UP

None at this time.

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	June 14, 2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Jireh Resources, LLC		
Facility Name:	McComb		
Facility Physical Location:	SW/4, Sec. 1, T, R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	2526 E. 71st St. Suite A		
(city, state, zip code)	Tulsa, OK 74136-5576		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	<i>Kent W Sanborn</i>		
	Kent Sanborn		Date
Supervisor Signature/Date	JACK ARIAS <small>Digitally signed by JACK ARIAS DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=JACK ARIAS, dnQualifier=0000035688 Date: 2017.08.30 12:21:37 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Jireh Resources, LLC / McComb
June 14, 2017

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W. Sanborn visited the Jireh Resources, LLC oil production facility located in the Latitude: 36.841139, Longitude: -96.504903 near Pawhuska, on June 14, 2017. No representative of Jireh Resources, LLC was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

Well 18W injector.

Section II - OBSERVATIONS

The injection well, 18W was started at 9:30am. And a fluid level was taken at 868 feet with Jireh Resources, LLC tape.

Section III - AREAS OF CONCERN

N/A

Section IV - FOLLOW UP

None

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	June 14, 2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Unknown (Bird Creek General Inspection)		
Facility Name:	Unknown (Bird Creek)		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	<i>Kent W Sanborn</i>		
	Kent Sanborn		Date
Supervisor Signature/Date	JACK ARIAS <small>Digitally signed by JACK ARIAS DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=JACK ARIAS, dnQualifier=0000035688 Date: 2017.08.30 12:25:03 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Unknown (Bird Creek General Inspection) / Unknown (Bird Creek)
June 14, 2017

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W. Sanborn visited the Unknown (Bird Creek General Inspection) oil production facility located in the Latitude: 36.832532, Longitude: -96.499991 near Pawhuska, on June 14, 2017. No representative of Unknown (Bird Creek General Inspection) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

A creek survey of the tributary of North Bird Creek and North Bird Creek was conducted during the inspection.

Section II - OBSERVATIONS

A follow up creek survey was conducted along the tributary of North Bird Creek and Bird Creek. With a calibrated YSI 30 Pro Conductivity Meter a reading of 800 parts-per-million (ppm) Total Dissolved Solids (TDS) was taken at bridge/culverts area which correlates to in-stream monitoring station No. 2. At in-stream monitoring station No. 6, approximately 1/2 mile downstream along the tributary of North Bird Creek, a reading of 42,500 ppm TDS was taken. I observed that stream flow was normal and stable during the inspection.

Section III - AREAS OF CONCERN

Continued elevated levels of TDS in the tributary of North Bird Creek and North Bird Creek.

Section IV - FOLLOW UP

Continue to conduct follow up inspections as needed.

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	June 15, 2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Unknown (Bird Creek General Inspections)		
Facility Name:	Unknown (Bird Creek)		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	<i>Kent W Sanborn</i>		
	Kent Sanborn		Date
Supervisor Signature/Date	JACK ARIAS <small>Digitally signed by JACK ARIAS DN: cn=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=JACK ARIAS, dnQualifier=0000035688 Date: 2017.08.30 12:25:39 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Unknown (Bird Creek General Inspections) / Unknown (Bird Creek)
June 15, 2017

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W. Sanborn visited the Unknown (Bird Creek General Inspections) oil production facility located in the Latitude: 36.83163, Longitude: -96.501246 near Pawhuska, on June 15, 2017. No representative of Unknown (Bird Creek General Inspections) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

An inspection west of the tributary of North Bird Creek was conducted of that pasture area.

Section II - OBSERVATIONS

During the inspection, I ran a metal detector over the general area of a suspected old well location with only minor hits for metal objects. Also, EPA identified possible saline soil areas with preliminary field measurements conducted by Phil Dellinger, EPA.

Section III - AREAS OF CONCERN

Possible old well site and some preliminary indications of saline soils in the area.

Section IV - FOLLOW UP

Conduct follow up inspections as needed.

Section V - LIST OF APPENDICES

There are no attachments to this report.



Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	June 19, 2017		
Media:	Brine		
Regulatory Program(s)	Underground Injection Control - Brine		
Company Name:	Unknown (Bird Creek General Inspection)		
Facility Name:	Unknown (Bird Creek)		
Facility Physical Location:	/4, Sec. , T , R		
(city, state, zip code)	Pawhuska, Oklahoma		
Mailing Address:	Unknown		
(city, state, zip code)	Unknown		
County/Parish:	Osage		
Facility Contact	N/A	N/A	
	N/A		
FRS Number:	N/A		
Identification/Permit Number:	N/A		
Media Number:	N/A		
NAICS:	21111		
SIC:	1311		
Facility Representatives:	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Inspectors:	K.W. Sanborn	6EN-WR	918-557-1615
	N/A	N/A	N/A
	N/A	N/A	N/A
State Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
Other Inspector(s):	N/A	N/A	N/A
	N/A	N/A	N/A
EPA Lead Inspector Signature/Date	<i>Kent W Sanborn</i>		
	Kent Sanborn		Date
Supervisor Signature/Date	JACK ARIAS <small>Digitally signed by JACK ARIAS DN: cn=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=JACK ARIAS, dnQualifier=0000035688 Date: 2017.08.30 12:26:16 -05'00'</small>		
	Willie Lane Jr., Chief, Water Resources Section(6EN-WR)		Date

Unknown (Bird Creek General Inspection) / Unknown (Bird Creek)
June 19, 2017

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector K.W. Sanborn visited the Unknown (Bird Creek General Inspection) oil production facility located in the Latitude: 36.846548, Longitude: -96.50611 near Pawhuska, on June 19, 2017. No representative of Unknown (Bird Creek General Inspection) was present for the inspection. The inspection was conducted by authority of the Clean Water Act to determine compliance with the Environmental Protection Agency (EPA) regulations.

FACILITY DESCRIPTION

Warren, Gray horse, and Jireh oil leases inspection.

Section II - OBSERVATIONS

At the time of the inspection, the following observations were made:

Novy/Grayhorse lease: Production was off and the work over rig was gone from well 15.

Jireh lease: At the time of the inspection, 18W was injecting at 0 psi. Well 4 was not on or producing. It appeared that most other producers were on.

Warren lease: All production wells were on. At the time, Injectors 7B, 8B were injecting. The 9B injector was off.

Section III - AREAS OF CONCERN

N/A

Section IV - FOLLOW UP

Conduct follow up inspections as needed.

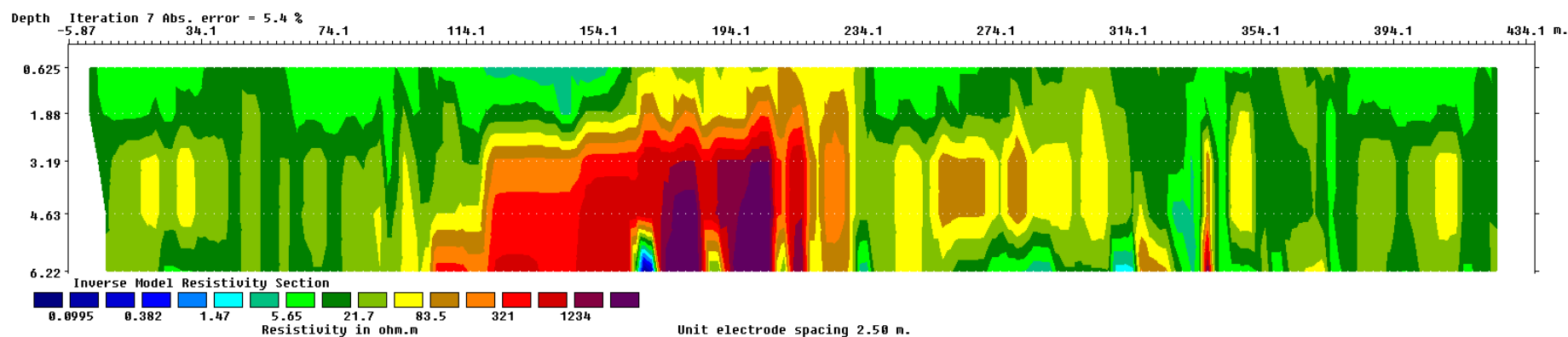
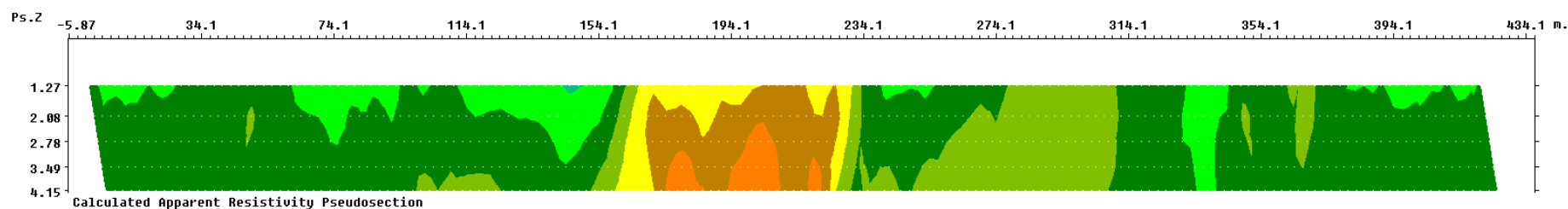
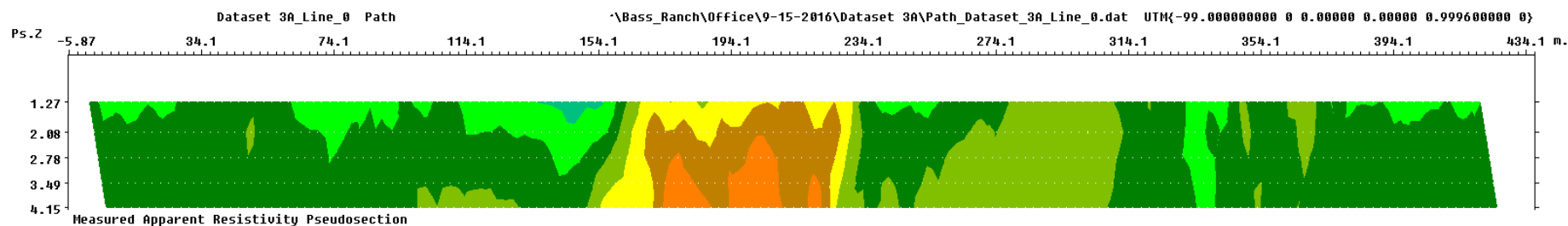
Section V - LIST OF APPENDICES

There are no attachments to this report.

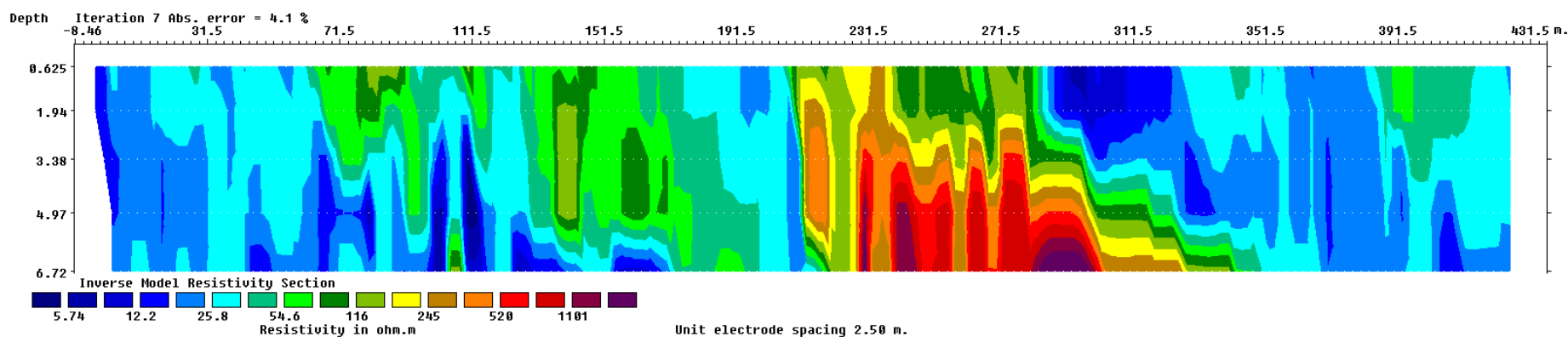
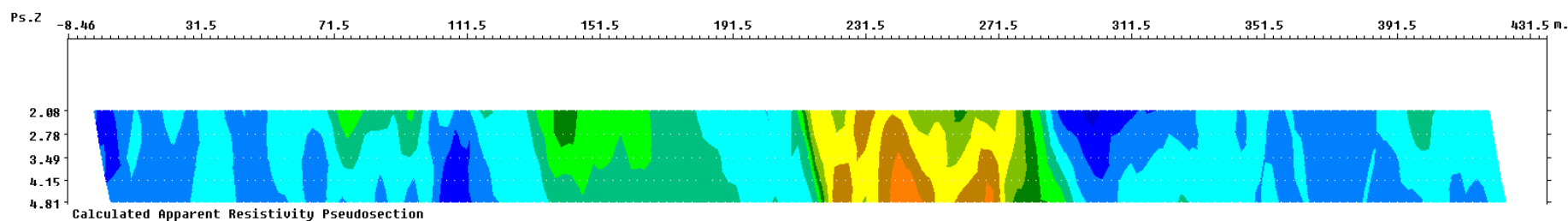
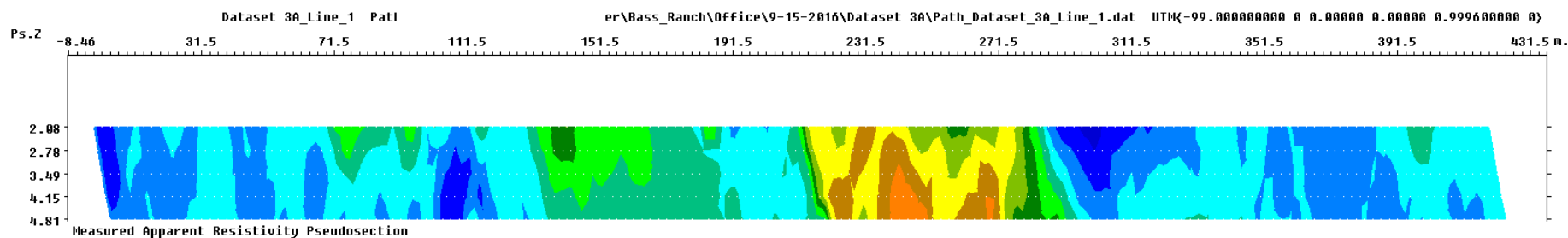
Dataset 3A



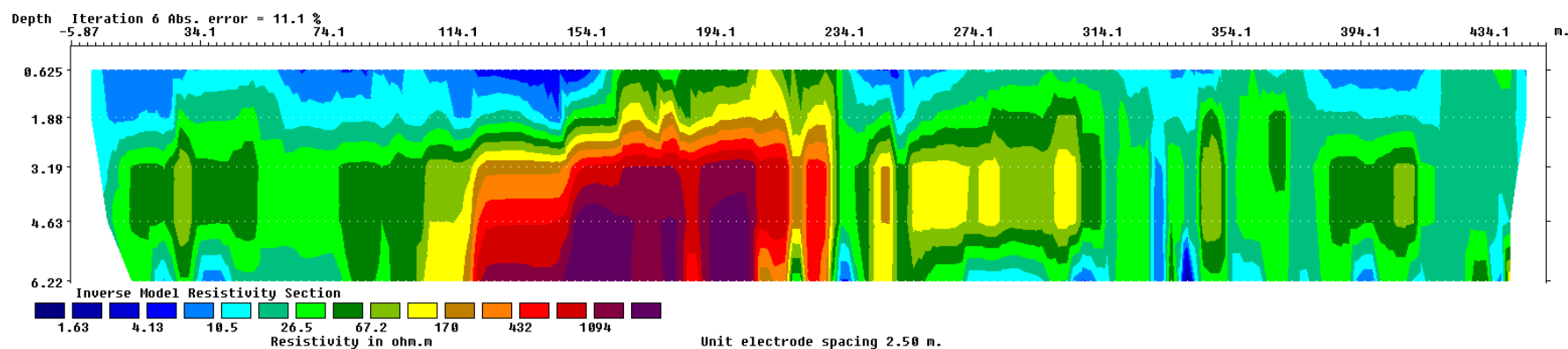
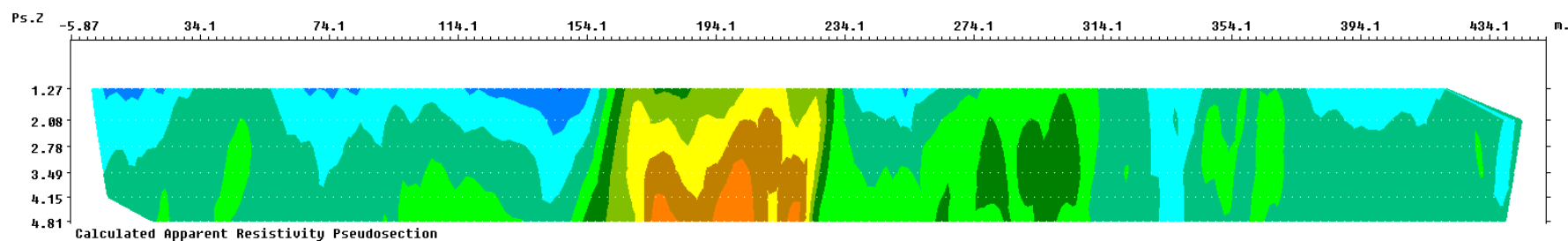
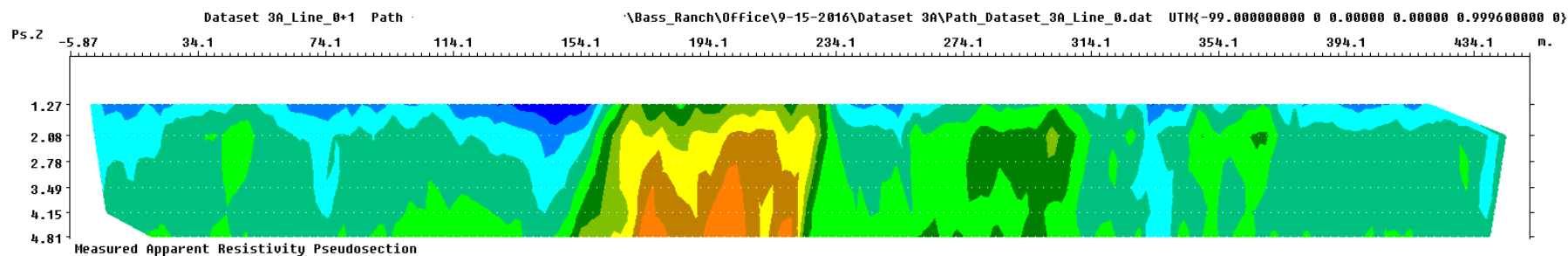
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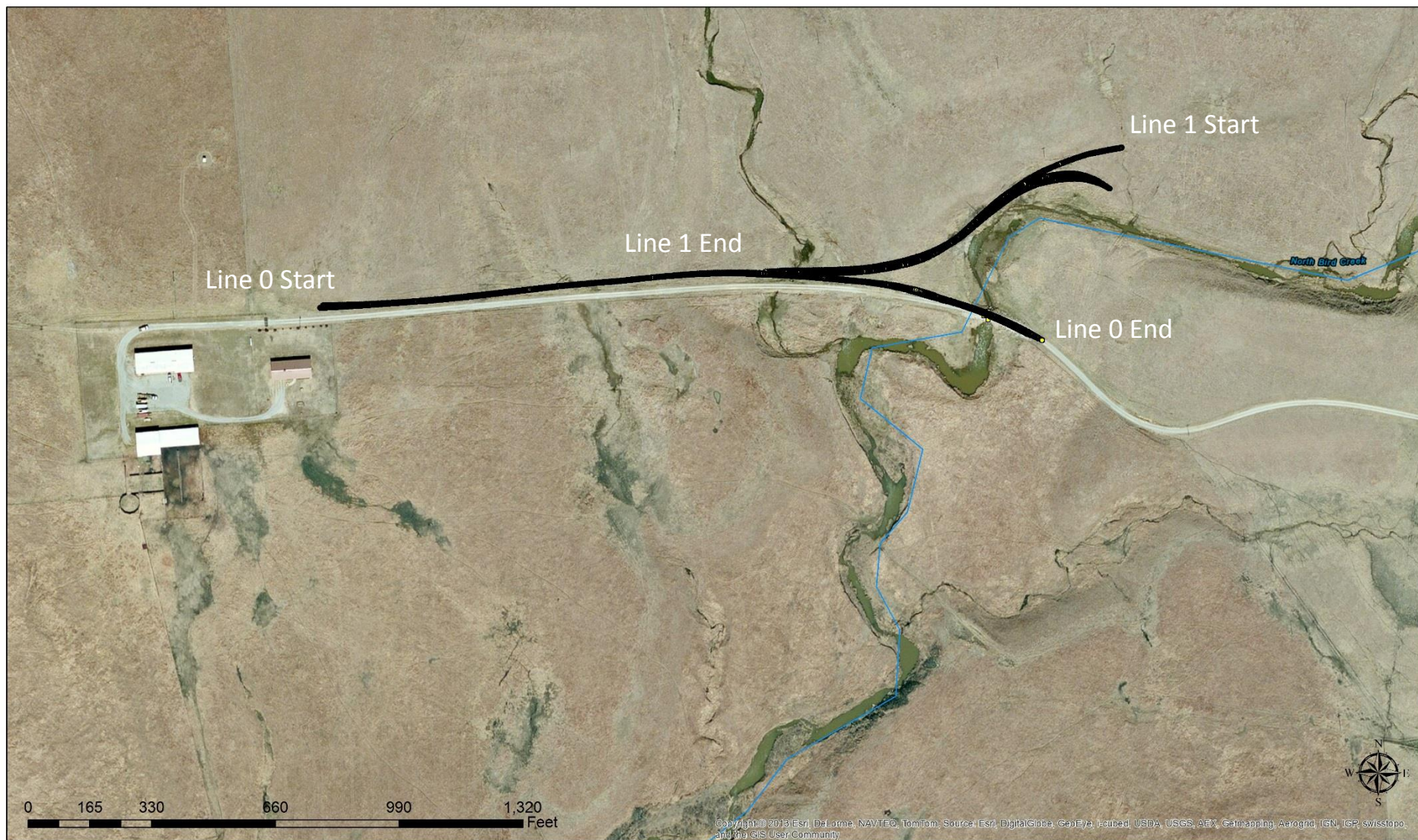


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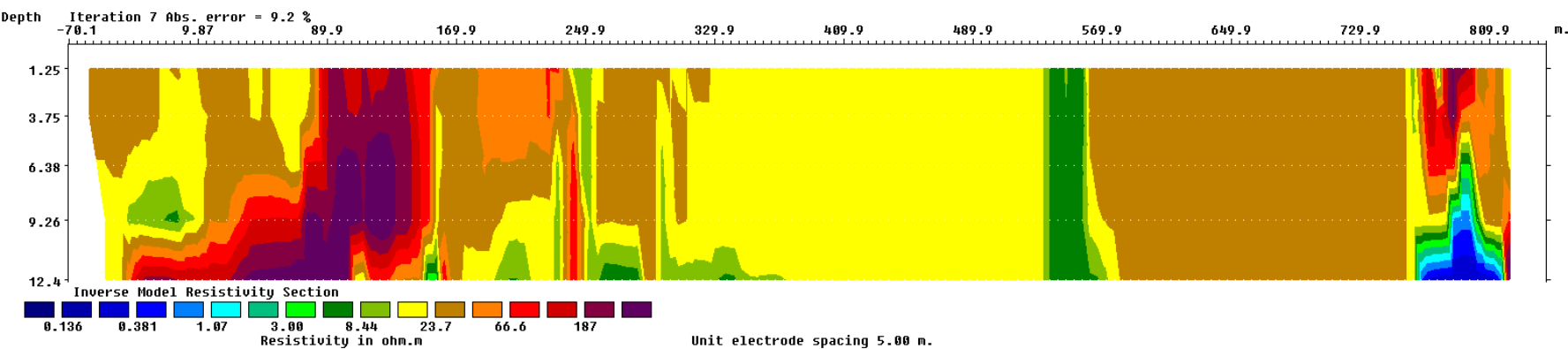
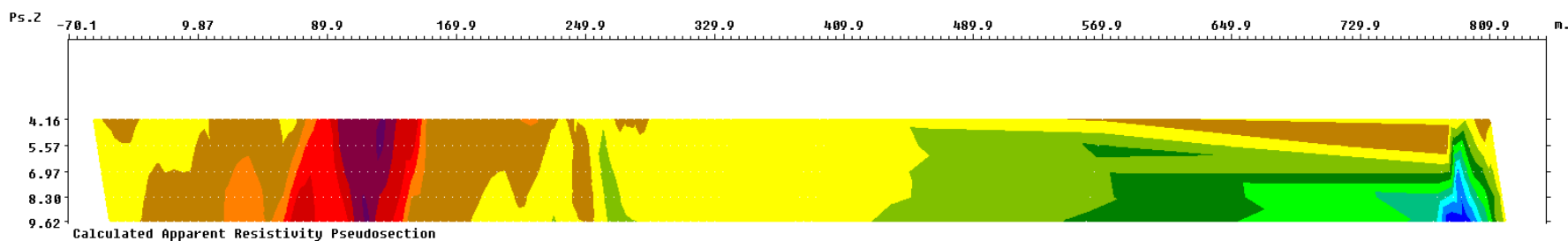
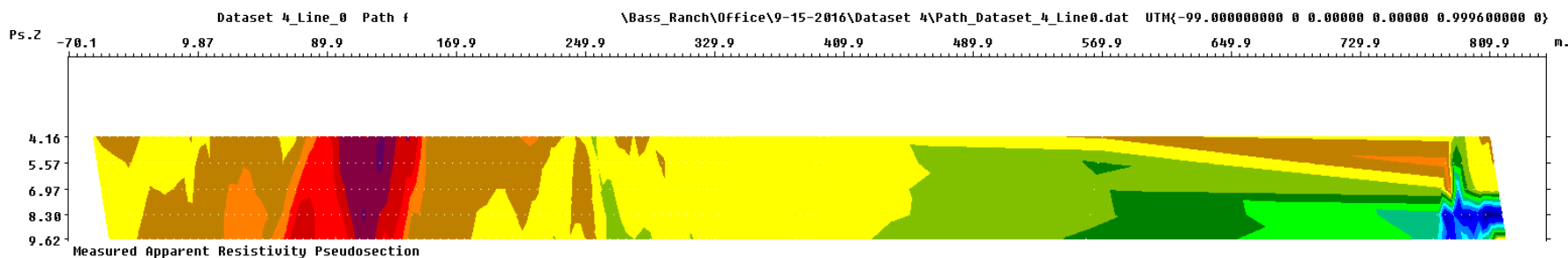


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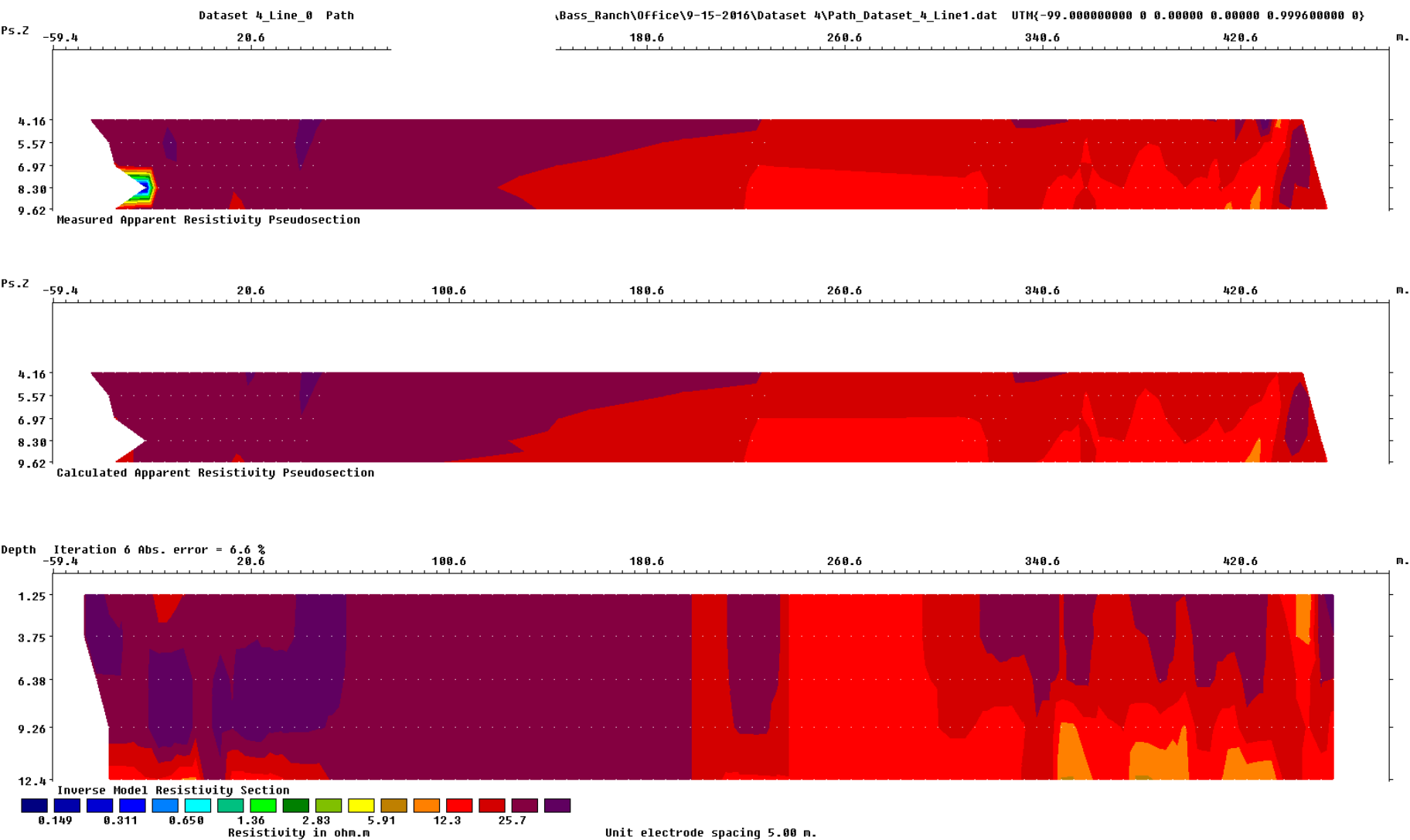




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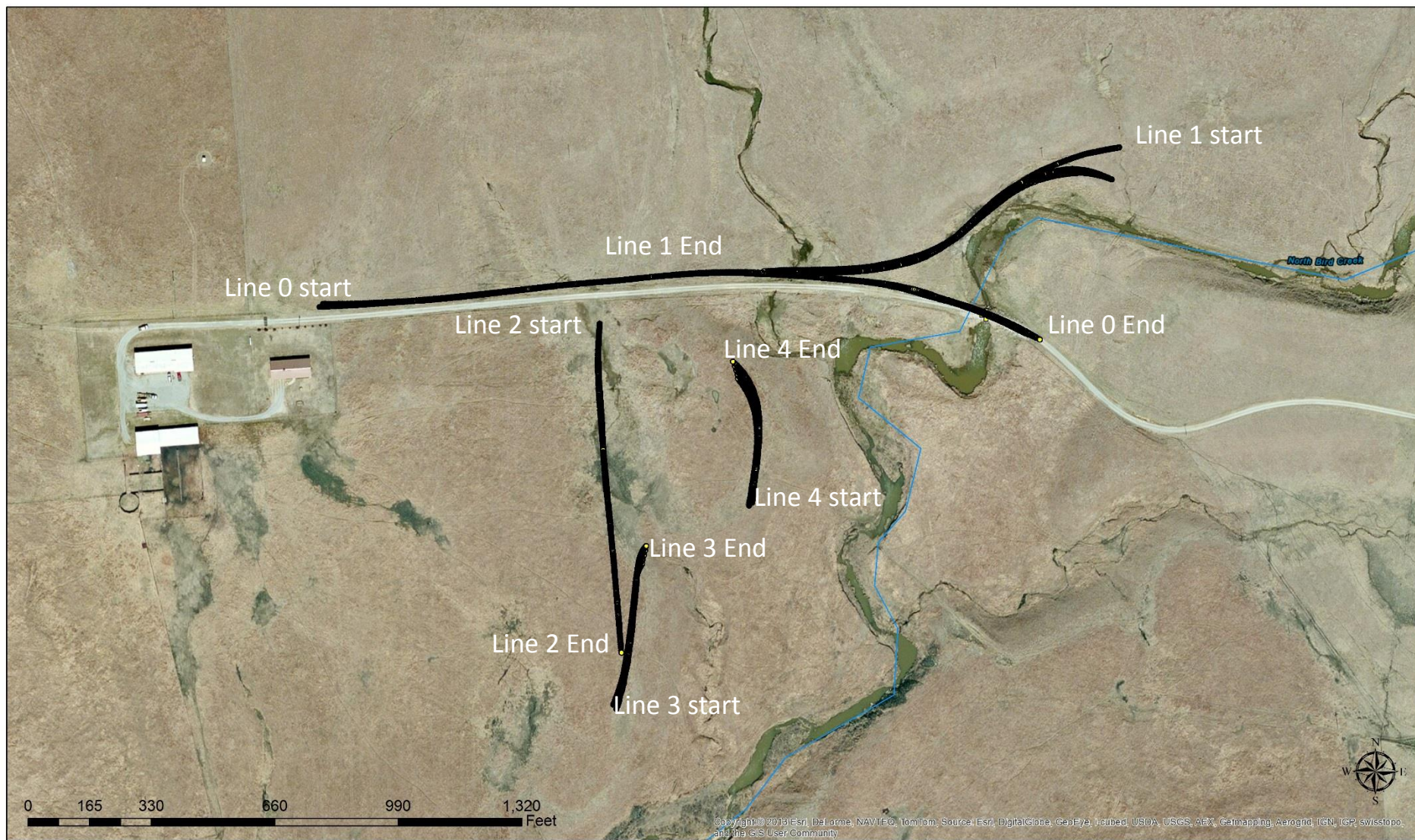


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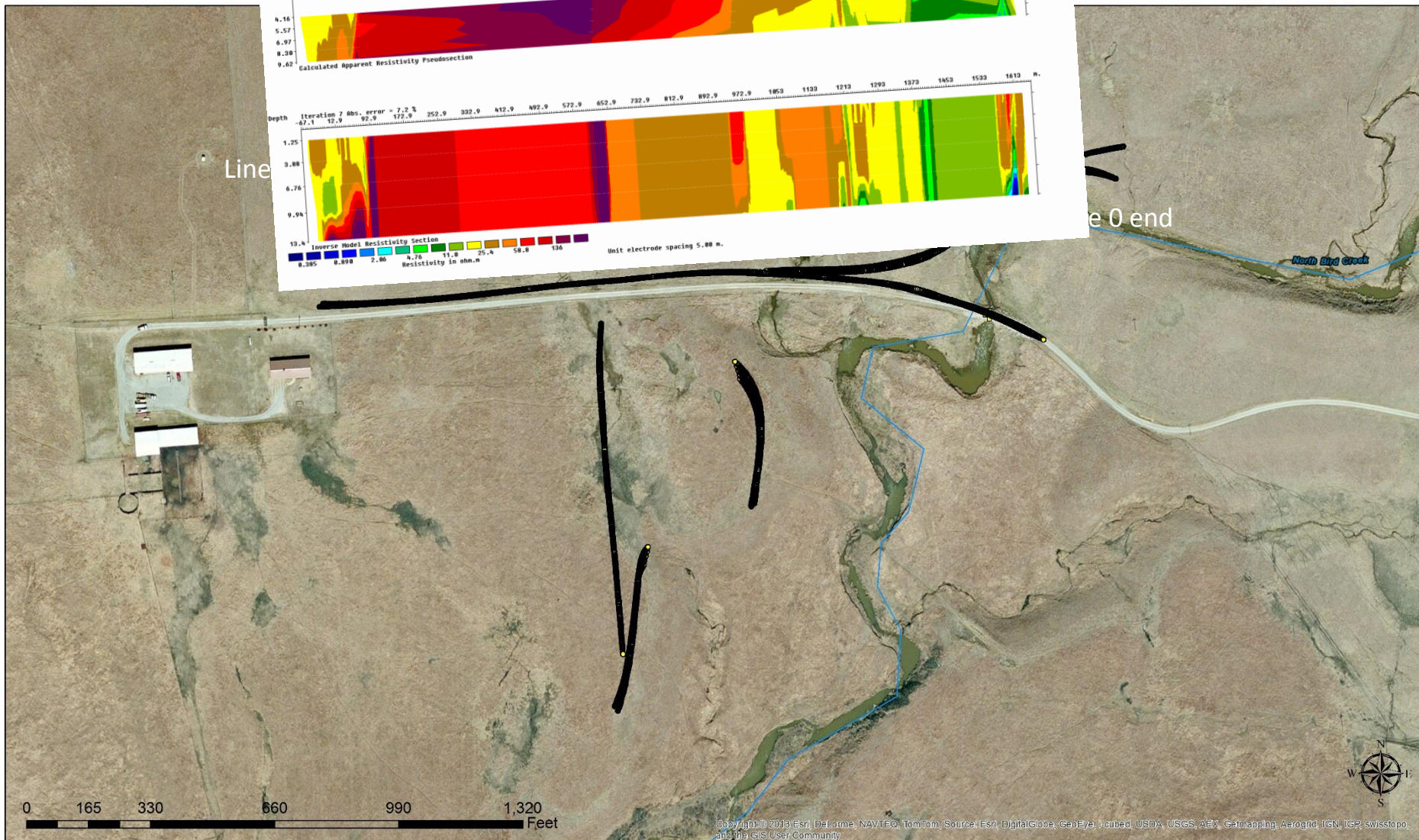
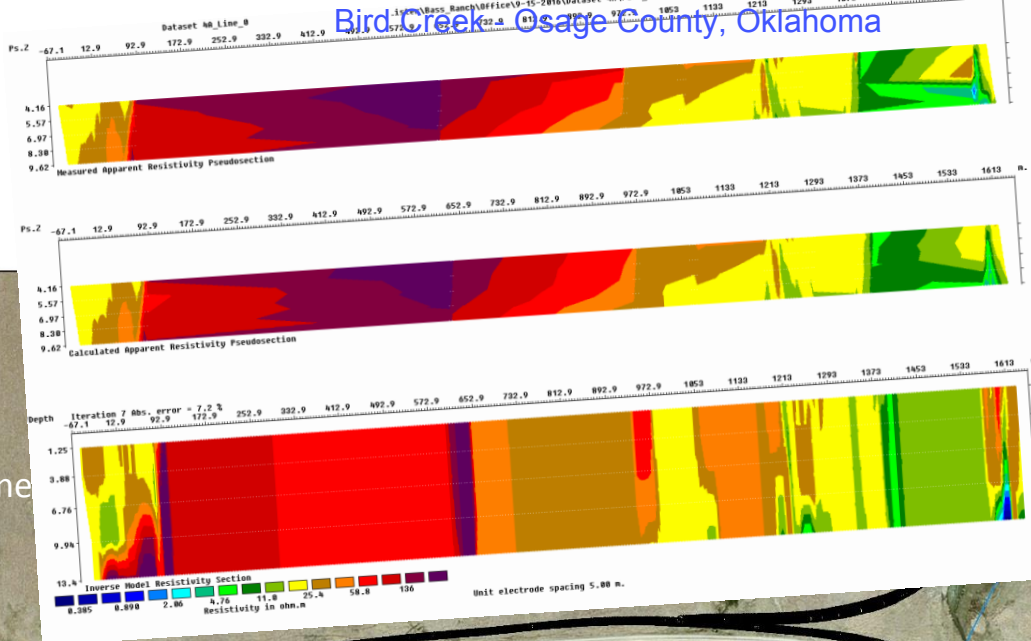


Bird Creek Area – Injection Wells

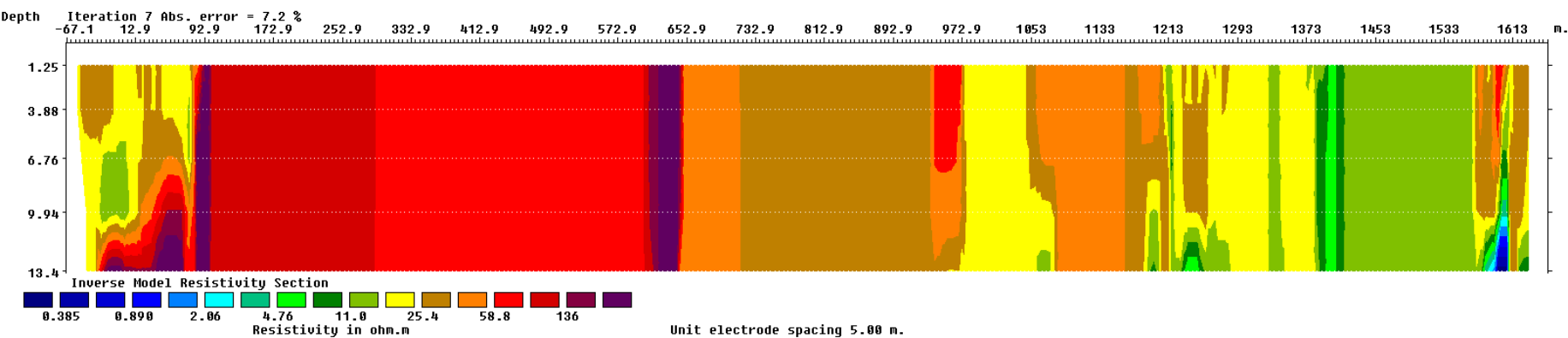
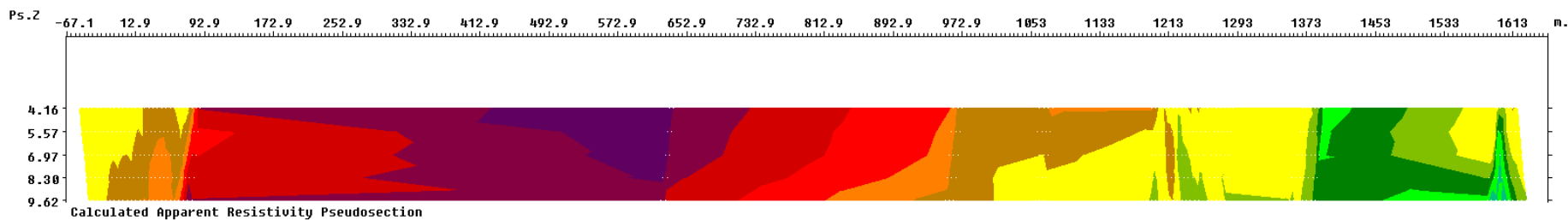
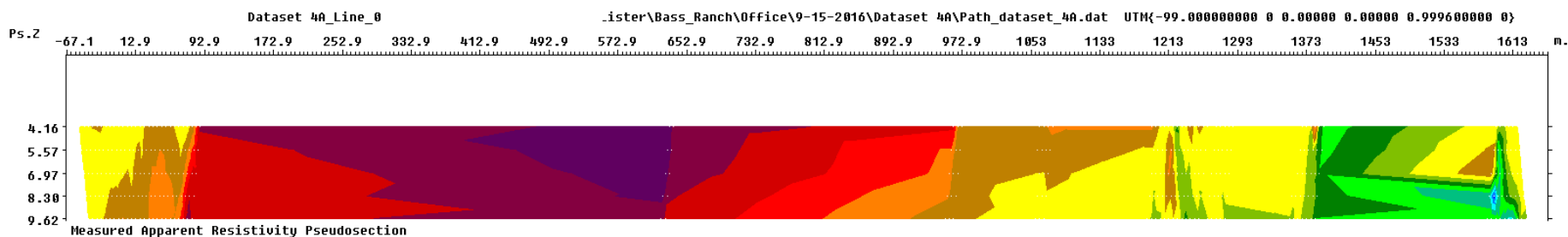


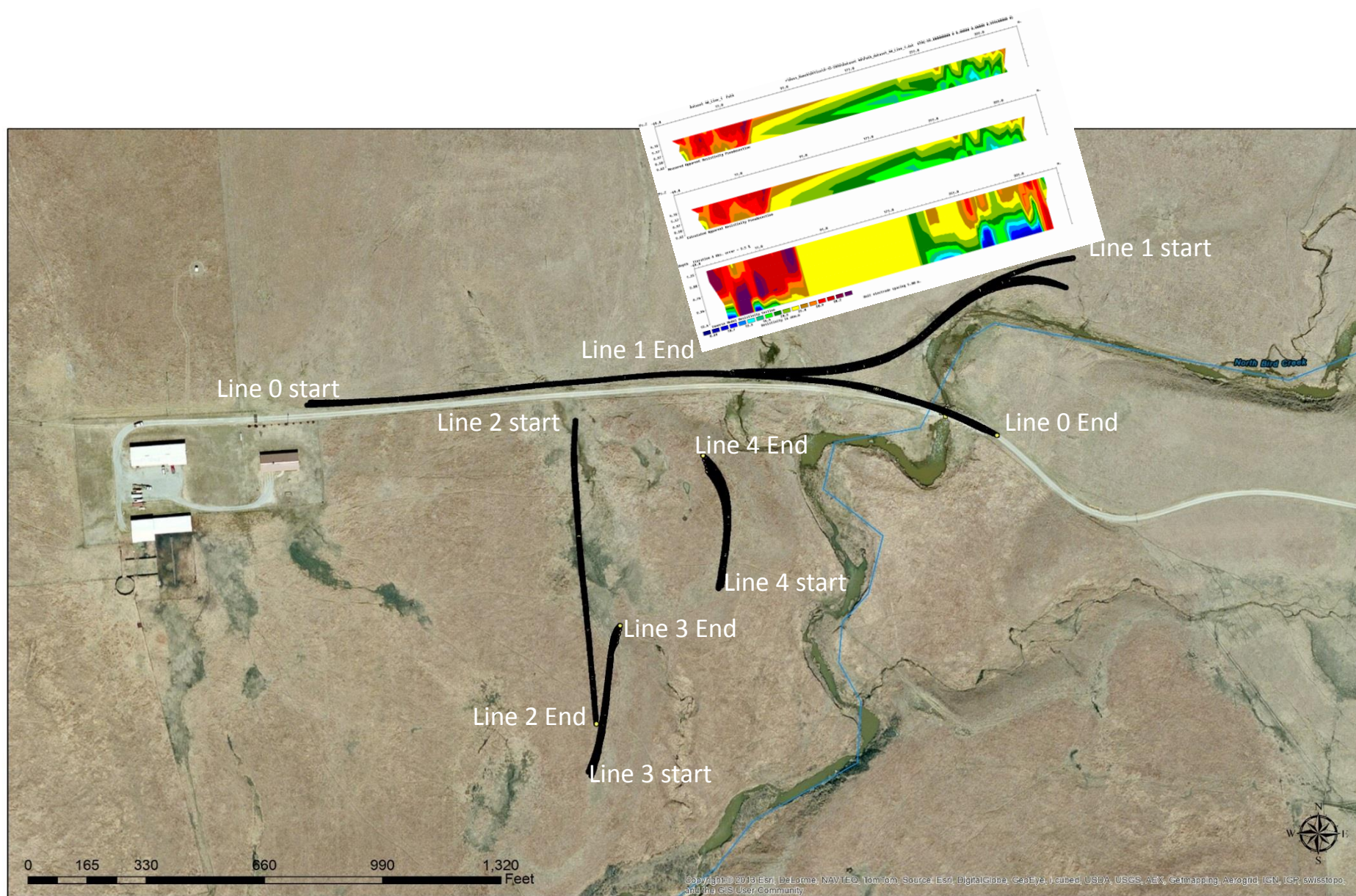
Line

Line 0 end

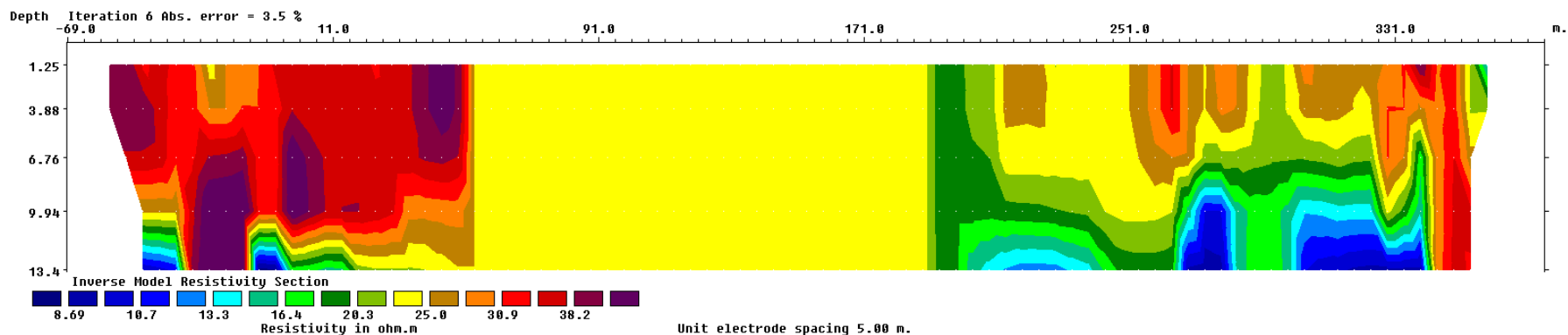
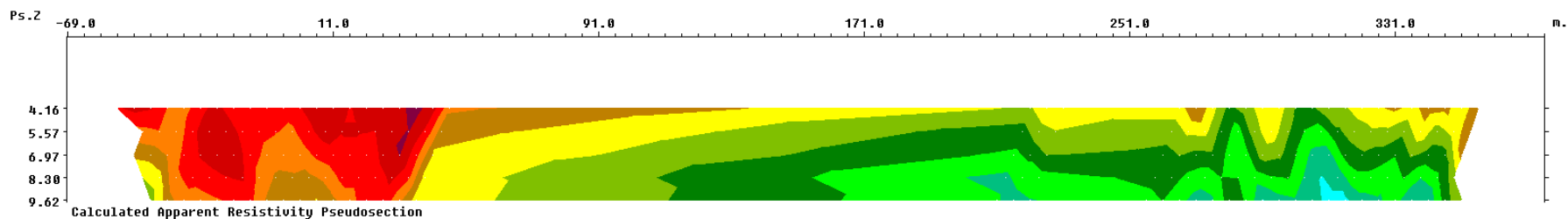
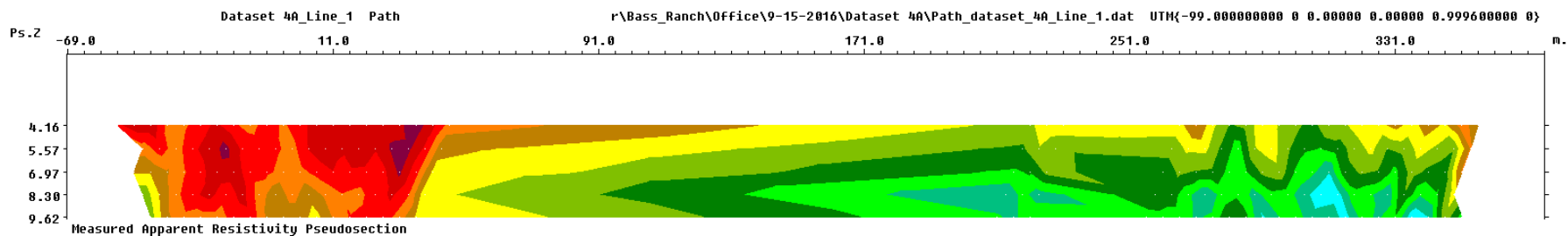


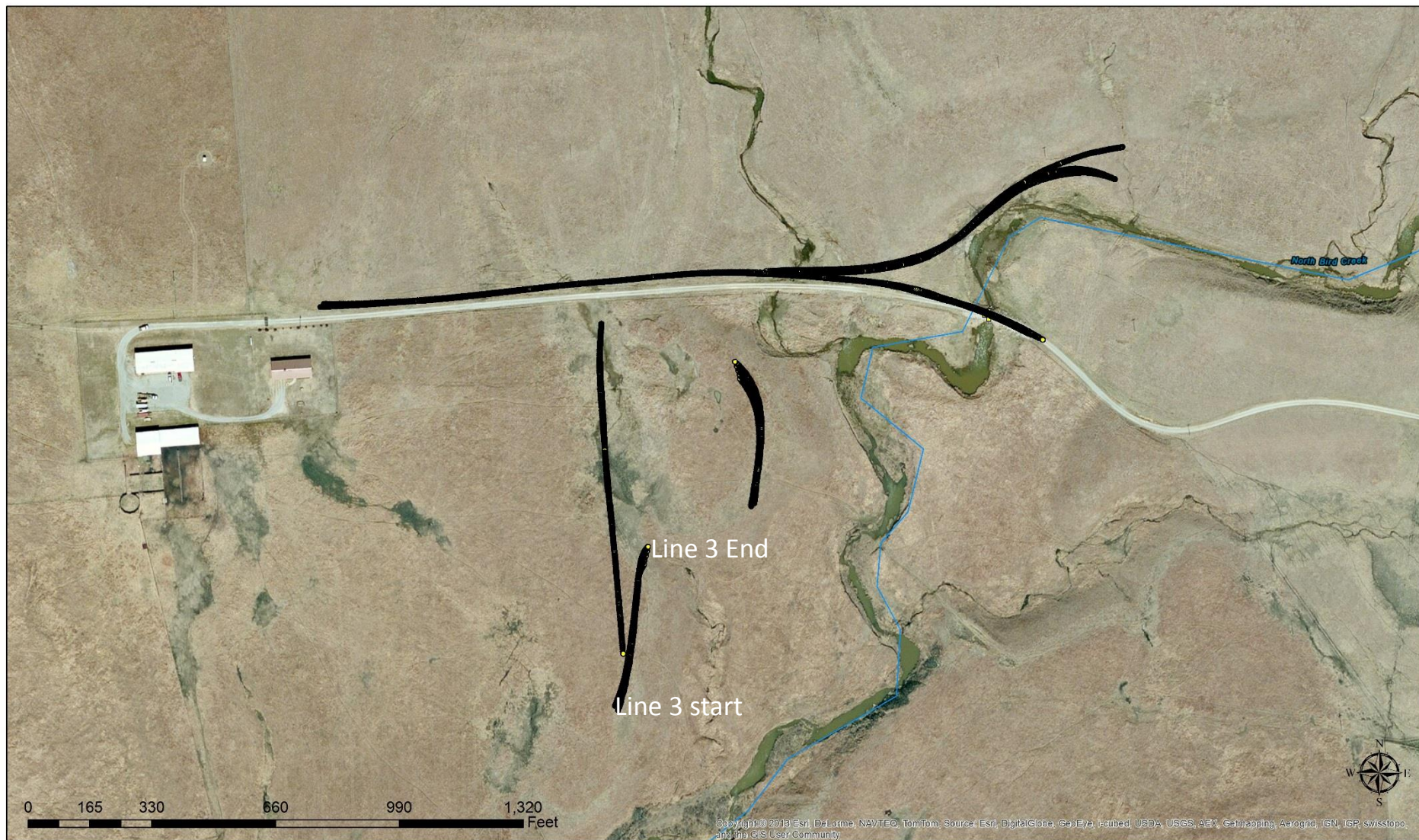
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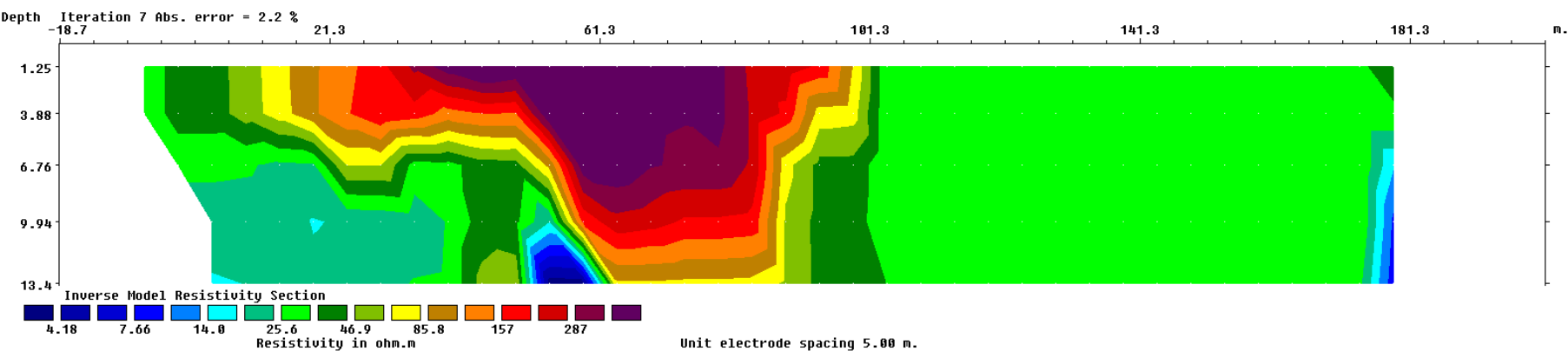
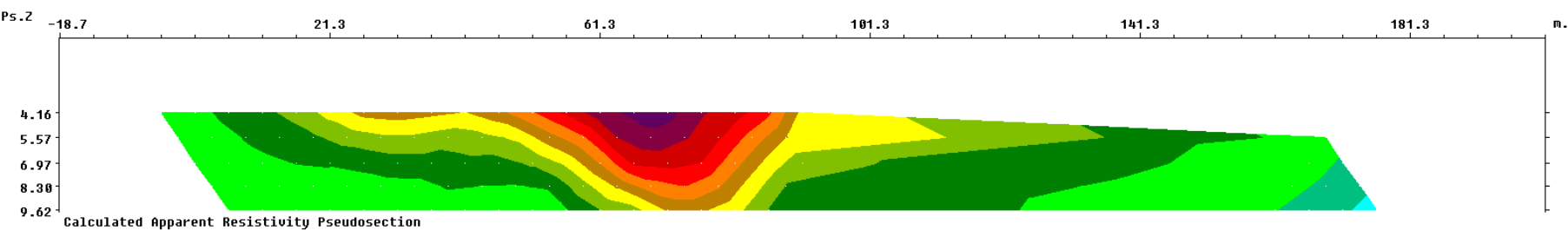
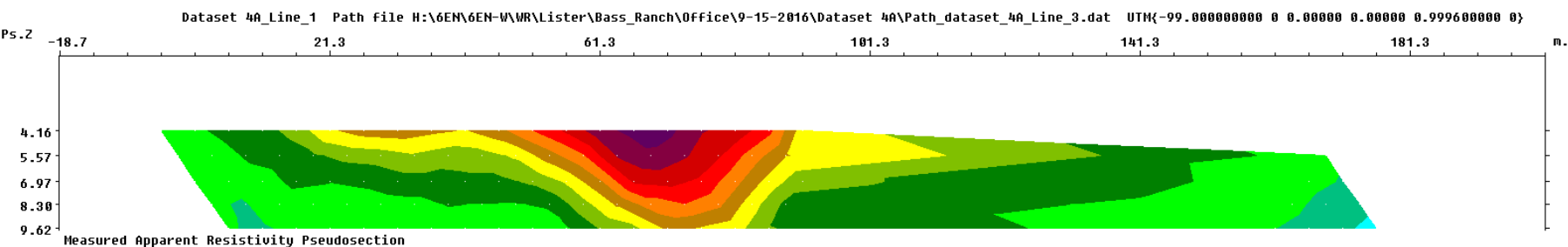


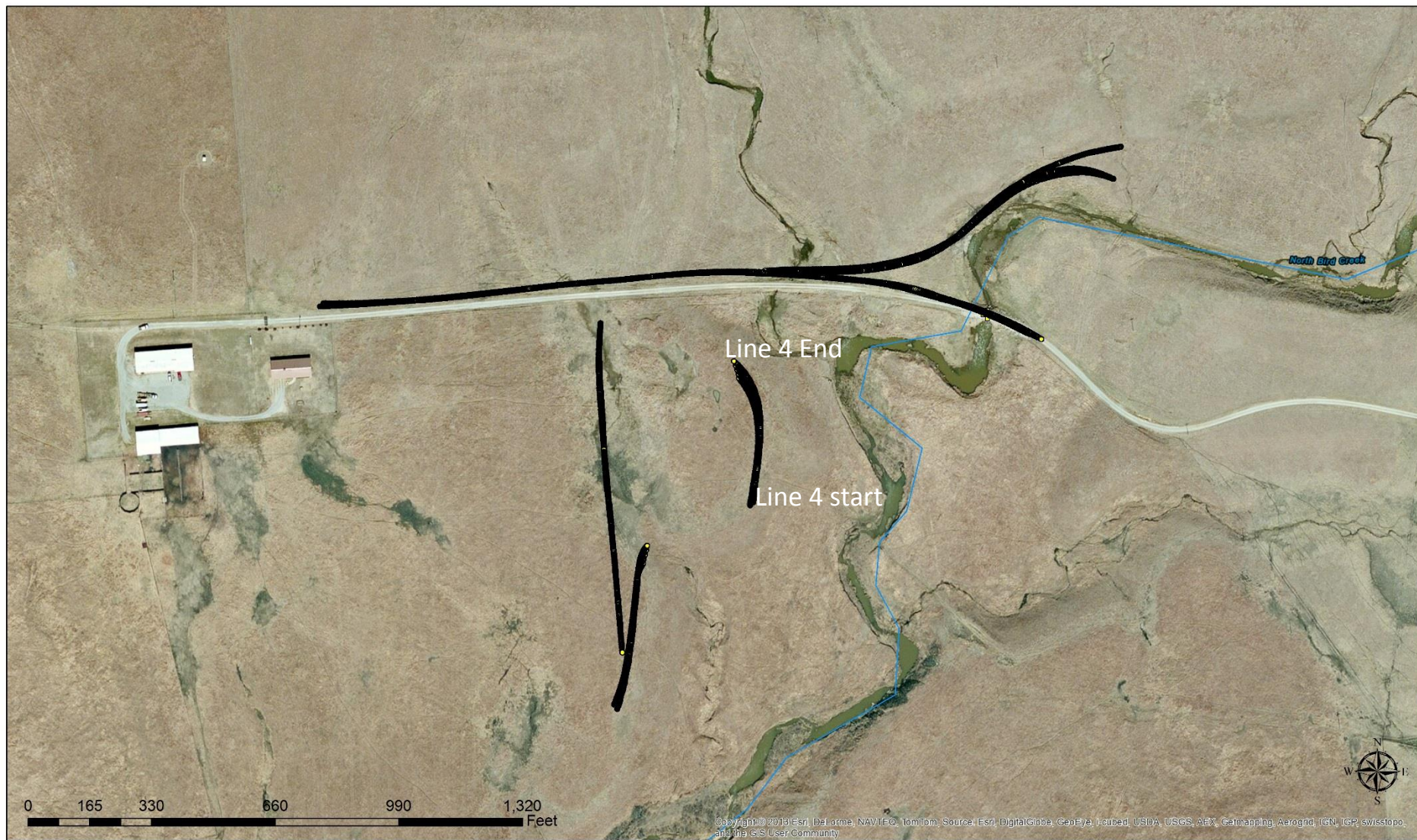
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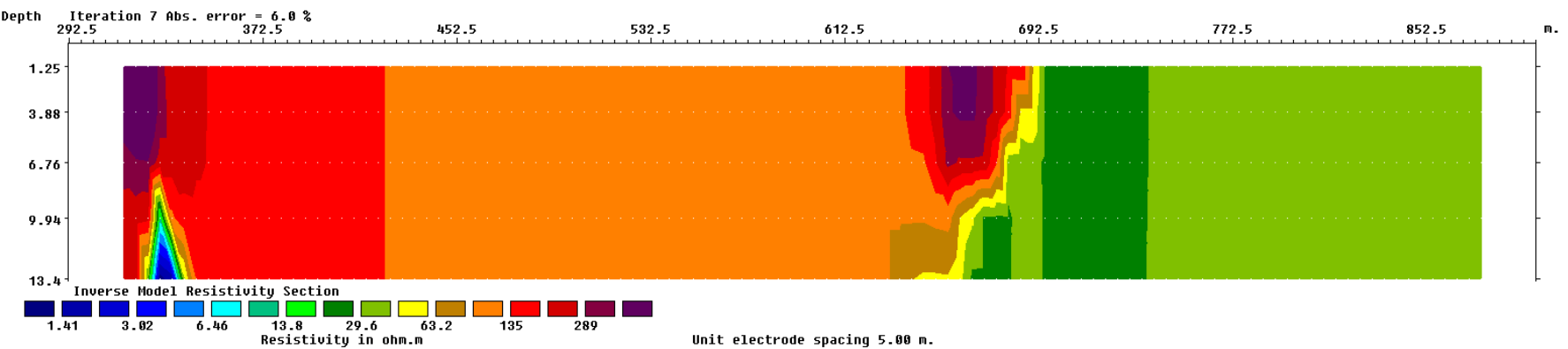
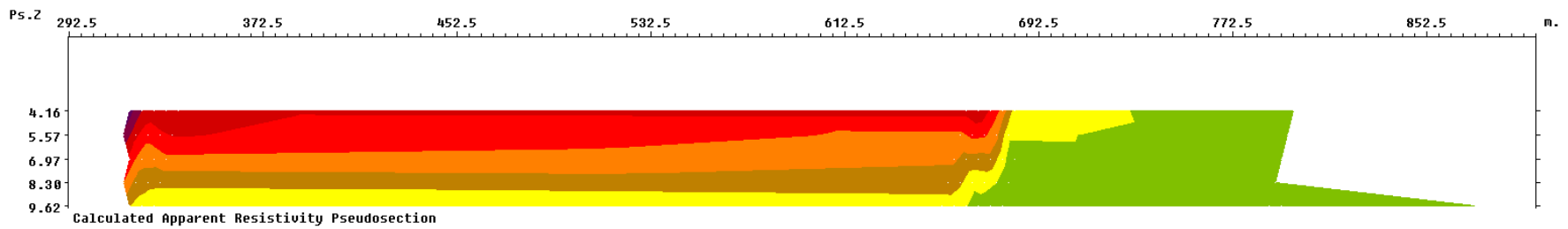
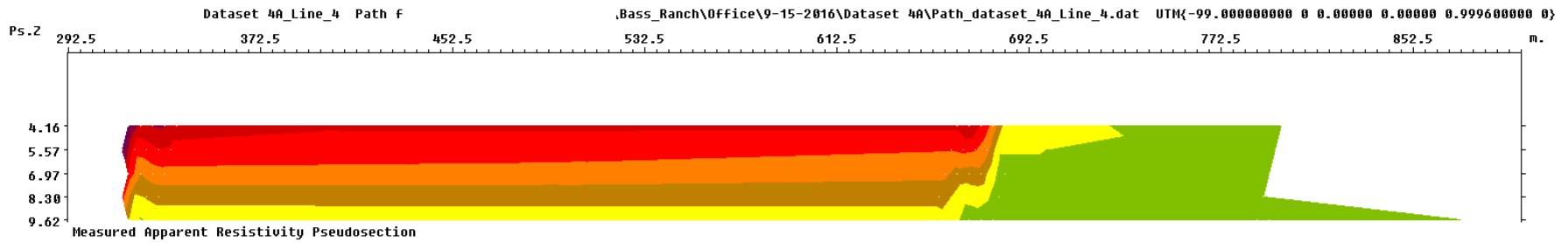


Dataset 4A Line 3





Dataset 4A Line 4



Wills, Carl

From: Sanborn, Kent
Sent: Monday, June 12, 2017 3:05 PM
To: Saunders, Jerry; Wills, Carl
Subject: Jireh fluid levels. Please distribute to all who are interested

Here is the list of the fluid levels obtained today at Jireh. Rick will provide a list of Warren Americans wells later today. We are done with those two leases. We will finish at Grayhorse tomorrow.

Well number	Fluid level from surface (ft.)	
18W	668	injection well
4W	739	injection well
15	769	TA injection well
9	555	TA injection well
5	650	
9	775	Blackland lease
12	710	
8	810	
16	550	
6	710	
7	cannot access due to corrosion	
17	916	
13	461	
7	2240	Blackland lease
1 (aka 1-25)	1119	
1B	1135	

Let me know if we need any more from this lease.

Kent W. Sanborn

Environmental Engineer/Field Inspector

6EN-WR

USEPA Region 6

918-557-1615

Wills, Carl

From: Davis, Rickey
Sent: Tuesday, July 11, 2017 11:25 AM
To: Wills, Carl
Subject: FW: Warren America Fluid shots,

From: Davis, Rickey
Sent: Monday, June 12, 2017 4:07 PM
To: Saunders, Jerry <Saunders.Jerry@epa.gov>
Subject: Warren America Fluid shots,

A-1	531'	Chapman#2	Believe is A-2	180'
A-3	301'	B-1	540'	
B-2	415'	B-4	830'	
B-5	569'	B-6	466'	
B-7	586'	B-8	563'	
B-9	504'	B-11	1376'	
B-12	1335'	D-1	2351'	
D-3	2444'	D-4	2520'	
D-5	1736'	E-1	432'	
E-2	923'	E-3	517'	
E-4	772'	E-5	1794'	

Wills, Carl

From: Davis, Rickey
Sent: Tuesday, July 11, 2017 11:26 AM
To: Wills, Carl
Subject: FW: Novy/Greyhorse Op FL

From: Davis, Rickey
Sent: Wednesday, June 14, 2017 8:36 AM
To: Saunders, Jerry <Saunders.Jerry@epa.gov>
Subject: Novy/Greyhorse Op FL

There were a couple T. A.'d wells on list that we unable to shoot because the heads were full of debris and capped with too small of orifices.

68	180' Arbuckle disposal well.	21	1567'
19	1074'	4	645'
14	656'	13	662'
18	783'	17	690'
16	756'	12	1126'
11	1033'	9	1103'